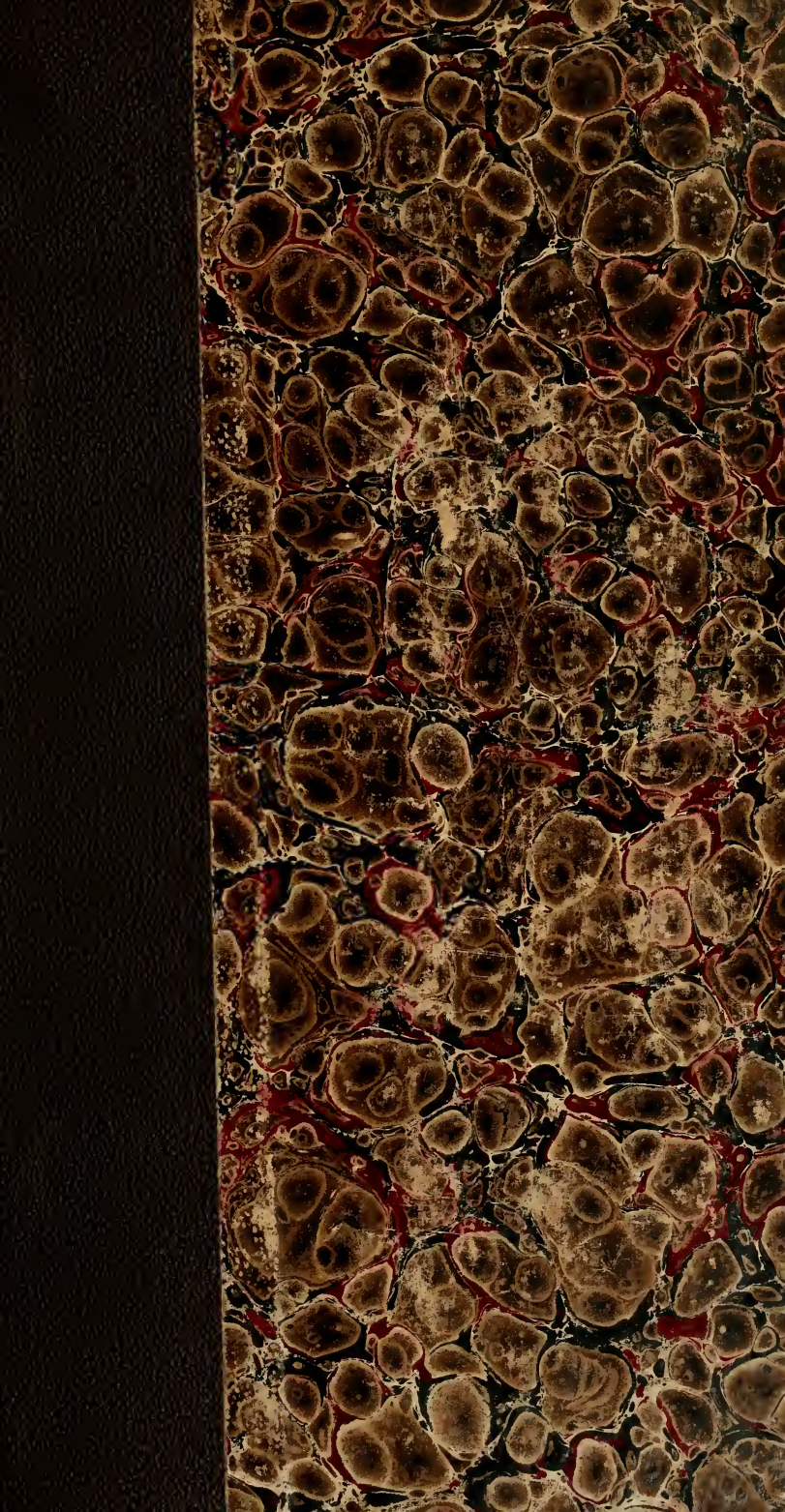




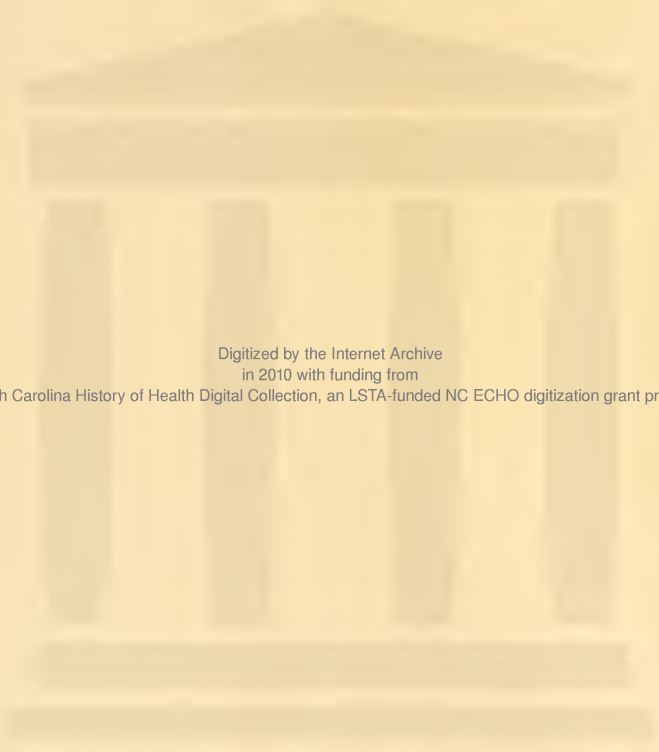
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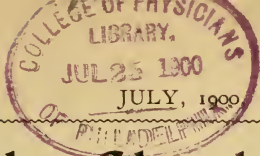
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Presented by
H. H. Kynett, M.D.

7/85



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The Charlotte Medical Journal.

A MONTHLY JOURNAL OF MEDICINE AND SURGERY.

EDITED BY E. C. REGISTER, M. D., AND J. C. MONTGOMERY, M. D.

CHARLOTTE, N. C.

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APR 12 1901

Suprarenal Therapy In Hay Fever.

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Used locally or internally, the Extract controls the vaso-motor vessels of the nose, reduces the turbinate bodies, lessens irritation, and stops discharge and sneezing.

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4. that it has in it everything we claim and in the exact proportion.
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6. that it is miscible with wine, water or milk.

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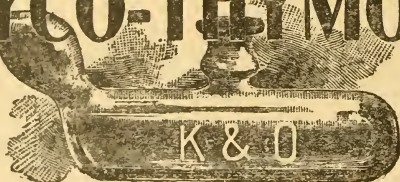
Sample and Literature sent on receipt of Physician's Card.

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CHARLOTTE MEDICAL JOURNAL, March, 1899.

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HASTENS RESOLUTION AND FOSTERS CELL GROWTH

The Charlotte Medical Journal.

VOL. XVII.

CHARLOTTE, N. C., JULY, 1900.

NO. 1.

Annual Address before the Graduating Class of the North Carolina Medi- cal College.*

By J. Howell Way, M. D., Waynesville,
N. C., Examiner in Anatomy and
Secretary N. C. State Board of
Medical Examiners.

Mr. President and Gentlemen of the Grad- uating Class:

Some time since, when I received the kindly invitation to address you on this occasion, I felt both honored and embarrassed; honored at your distinction, embarrassed with the responsibility of being the last to address a class of most intelligent young men just embarking on the unknown sea of professional life, remembering if there is any advice young men are inclined to heed, other than the advice they want, it is possibly that last heard. But in my dilemma, I did exactly what you young gentlemen have so often done in the past few years when difficulties have confronted you; I consulted your honored President, Dr. Munroe about it. He advised me that the addresses usually given on these occasions here were either sermons or humorous; this was not the kind of advice I was looking for. I again referred to the letter of invitation from the class secretary and read, "deliver the annual oration." My confusion was worse confounded; *poeta nascitur non fit*, I had not been born an orator, to sermonize was alike beyond my ken, while fifteen years close contact with the serious prosy side of sick people made it too late in life for me to successfully assume the role of the humorist. Verily I was left in the attitude of the man who had received the advice of a multiplicity of doctors about his malady. But I recalled that you young gentlemen stand at a certain place in the great highway of life where not so many years ago I stood myself. And as it is a custom among those modern peripatetics, the tramps, to note about the premises where they professionally call certain signs which are said to indicate to their fellows information as to the canines kept

on the place, the cordiality of reception accorded visitors, the character of refreshments served to guests, etc., that those who come after them may be warned to escape possible dangers or invited to linger and feed on pastures fresh; so on the same principle, I thought a peripatetic, though of a different school ("regular," if you please), who has more or less industriously trudged along the dusty highways and rose-girted lanes of active professional life, might be able out of the fertility of his individual experience, to offer to you who are about to take up the same line of march, possible words of warning, of counsel, or of encouragement. With a variety of topics to touch upon, and only limited time at our disposal, you will appreciate the fact that my remarks can merely be suggestive rather than elaborative.

I need not say to you that the profession upon whose threshold you stand is a most ancient and honorable one. Its early history, like that of other sciences, is involved in mystery, and investigating it we find innumerable myths and fables intermingled with facts so intimately blended as to leave the historian in a bewildering cloud of uncertainty from which there seems no escape save that of skepticism. Medicine, not as a science, but as an art, undoubtedly had its first beginnings shortly after the fall of man. From the use of the most simple cooling applications to soothe the fevered brow, from lotions of oil or of wine to the earliest wounds, from the exhibition of the homeliest remedies to alleviate the distresses of the human body, down to the present time the art of medicine and its science has grown; at times slowly, again more rapidly, until now as an art it stands forth as the most beneficent of all the vocations of life which engage the attentions of intelligent men, and resting upon a scientific base broadening from year to year, and which elicits both the wonder and the admiration of the world. And while medicine may never attain the dignified title of being an exact science, yet many of its branches so closely approximate scientific exactness that we are every day more and more warranted in using the term "scientific medicine." Entering the profession as you do now, you are to be congratulated on so many vital truths being known, so many others in pro-

*Delivered at the Commencement Exercises
May 14th, 1900.

cess of rational development. The young man of to-day enters upon the practice of medicine with an exact knowledge of the nature and treatment of disease which would have seemed colossal to the honored names of the past like Hippocrates, or Galen, or John Hunter, or our own Benjamin Rush.

Formerly instruction was wholly didactic based upon theories now known to be false; now teaching is largely done in the clinic and in the laboratory, and does not rest upon vague theories, but rather upon the scientific findings of the clinic and the laboratory. Men of the older generation knew that cholera came from the far east, and yellow fever from the south, that suppurative processes and erysipelas were very frequent results after surgical operations—all these things were known in a vague, indefinite sort of way, but the essential cause—the *materies morbi*—was veiled in mystery and the treatment was empiric or expectant. Now you are placed in the laboratory and there shown the ultimate tissues of the body, being taught to differentiate the healthy from the diseased structure; you see disease artificially induced in the lower animals by the introduction in the tissues of the identical cause which produced it in man—the exact nature of erysipelatos and suppurative infections are known to you, and if you do not in your practice prevent and protect your patients from them you are an unworthy disciple of modern medicine and untrue to the best teachings of the times. Not only is the student of to-day taught these basic principles of surgical practice, but the same principles extend to non-surgical disease. Face to face with the patient the clinical histories of the cases are studied, pathological lessons impressively demonstrated; in short the true significance of the cases are plain, and you are made thoroughly familiar with those agents which when used topically or internally neutralize the toxins elaborated by the pathogenic micro-organisms. And in passing, gentlemen, I may be permitted to note that in the quietude of your environment here in close contact with, and under the classic influences of the other excellent schools of this institution, far removed from the temptations to sight-seeing and possibly other worse dissipations incident to metropolitan life, I have no doubt you have most thoroughly and conscientiously pursued these technical studies.

Every logically minded man must have a reason for the faith that is within him. Every practicing physician, whether he has opened a medical book or scanned the pages of a professional journal in a decade or not,

has a reason or reasons, for believing that such a disease is, or is not before him, or for prescribing the treatment he orders. And whether your ignorant prescriber ever acknowledges it or not, the ultimate source from which he derives the premises from which he intelligently reasons were his professional works. No man is fitted to look for a certain thing unless he has a more or less complete knowledge of the characteristics of the thing to be sought for. No physician can ever hope to be an expert diagnostician or a well-rounded therapist unless he is thoroughly grounded in the knowledge of the nature and variations of disease, and of the measures for their alleviation—in common parlance, he must know what to look for, be able to recognize it when he sees it, and complete the triad of ripened professional experience, by also knowing what to do when he sees it, what measures of treatment to institute. And while the public at large, and some doctors too, are very prone to believe that when attending a medical college one sees and is brought in direct contact with innumerable cases of every possible type and kind of disease that human flesh is heir to, you and I know that this is not so. We know that catalogued as there are now more than eleven hundred different disease possibilities for the human race (and evolutionary, social, and other influences are daily adding to the number), that not only does the most advanced and thoroughly posted medical student, have the opportunity of studying clinically only a very small number, comparatively speaking, during the years of his college career, but that there is not likely either living or dead any physician who has personally seen even a single case of them all. Gentlemen, unless you continue to most diligently study your textbooks you can never hope to even attain a local eminence in your profession. As a not agreeable but none the less pertinent illustration of how this theory of mine works out in practical life, permit me to direct your attention to the unfortunately too often witnessed professional disagreements in so many sections of both the State and nation during the past few years upon the question of the existence or non-existence of small-pox in a given locality.

To a small town there came two young men with mild cases of variola from which were developed in the same families other cases. One of the patients was seen at his office by a quiet man whose colleagues had more or less often accused of being a "book-doctor and not practical," who promptly on the spot indicated his belief in its being probably a variolous eruption fraught with

danger to the community, and then and there advised the immediate return home of the young lady and the prompt vaccination of the remaining members of the family who had not yet developed the disease and of all other exposed persons. This doctor had never treated a case of small-pox, while the physician who attended the young men and who saw the young lady who presented herself at the other physician's office with three or four small pustules on her face and neck, was reported to have seen recently large numbers of cases of small-pox patients during his career as lieutenant of infantry (non-medical) in the Spanish-American war. The diagnosis of variola was scoffed at, and the infection was allowed to spread. His opinion as to the disease being only "chicken-pox" was corroborated by two elderly medical men, one of whom had (so one of the newspapers at the time said) had an enormous experience with small-pox in a northern hospital; the other had he claimed also treated a number of cases. The "theoretical book-doctor" merely ordered a plentiful supply of vaccine and patiently bided his time; only a very few weeks passed and it was his experience to be called to help save the life of the sister of the same physician who treated the first cases from this most horribly loathsome disease, and her scarred face will long remain a silent witness of an unfortunate error and a crime against a community. Such is life—a most unpleasant incident in one's professional career, and one that is here referred to not to exult over (far from it), but to admonish you with the fact that without the knowledge of the variations in type of variola in recent years, which knowledge was only gained from a careful study of recent literature, the prompt diagnosis would not have been made.

Do not waste much time in selecting a location, but having placed yourself in harmony with any local or State regulations affecting the practice of your profession, go to work. A place where there is no doctor, or where they need one badly, is most likely an undesirable locality in which to live and the possibilities of success limited. Had the prophet lived in our time he might have questioned the existence of a "balm in Gilead," but he would never have asked "is there no physician there?" Over the hills, across the valleys, on the mountains, amid the meadows, everywhere the irrepressible doctor rides and thrives, and if you find an opening, it must be one of your own making. In the natural order of society, the doctor is considered, not so much as a missionary or a martyr, as a possibly expensive luxury or an inconvenient but

almost inevitable necessity, and while it will be the duty of some to practice in the poverty-stricken districts or amid the penury-perfumed hills, yet common business sagacity (and I know of no good reason why even though a man has studied medicine he should not have some business sagacity) should make one rather careful to select a situation where there are possibilities both of greater usefulness and of material prosperity before him. I believe it is perhaps better to locate at the start where you are willing to spend your professional lives and grow and develop your professional career from the beginning than to seek a temporary location and expect later to find a better one—to the great majority of men the change to the better never comes. "All things come round to him who will but wait," says the proverb, and its truth is borne out in the history of nearly every man who has attained success in medicine. Few, if any of you, will ever be able to say with young Lord Byron, "I awoke one morning and found myself famous,"

While you may have a case at the start which brings you reputation and pays you well, yet it is never well to calculate too largely upon the value of an easy or an early won success, for professional character and a reputation can not be built in a day or in a night, like Alladin's palace, nor does it spring up and reach the clouds by magic like the beanstalk of fairy lore. Nothing worth the having can often be attained without continued and persistent effort, and the young physician who expects in a few months or even in a few years to stand upon the same plane of professional or financial success as that occupied by the man who has worked hard and waited long is liable to meet with disappointment. Were this otherwise, then success were too easily earned and not worthy of the supreme effort. Remember the early professional history of the illustrious Marion Sims; how he waited studying hard in his office for months when the two first patients came. They were cases possibly pathologically doomed to the inevitable death which took place a few days later notwithstanding all of Sim's well-directed efforts to save the children. I know of no more pathetic incident in the life of a great surgeon and a truly great man, than to see him the following night after hours of painful wrestling with himself, going to the well in the rear of the premises where he officed and dropping down into it the little tin shingle inscribed "Dr. Sims," which had previously adorned his office door, thus closing his professional career in that city. Yet new life and hope with renewed energy

came to Sims, and before his death honors and decorations, not only from the American people but from every quarter of the civilized world, poured in upon his modest head and dying he left a name that so long as the history of scientific medicine is preserved will be sacredly kept as one of the greatest men our profession has produced.

Unfortunately there are physicians who delude themselves with the idea that having attended a medical college, followed the prescribed routine of study, and securing their diplomas and State license, they have no farther need for books. To those who do study books and read regularly the current literature of the profession, and who show a disposition to search farther into the nature of disease than it is possible for any man however intelligent and studious he may be during the short term of his college career, they affix the term theorist. And to these men a theory, no matter how well-founded, has something dangerous about it, and indicates to them mental unsoundness and impracticability in its author—that this type of men should ridicule the student-doctor is no more than that an eunuch should inveigh against lechery; it is merely the chastity of impotency. Be not deceived by such talk, nor deterred from pursuing to the fullest extent possible the careful study of all the medical books you are able to buy. Eventually you will, pursuing this course, find yourself in possession of a stock of knowledge that will make you a more useful man in the sick-room and you will also likely enjoy the experience of more frequent consultations with the men who at one time regarded you as “too bookish for real practice.” Never forget that medicine, besides being itself a science made up in part of many sciences, is an art based upon collateral sciences, and that no man can bring to its practice too full an equipment of knowledge, both general as well as special. You will but rarely find an eminent man in medicine or surgery, or even the specialties, who does not possess a large and well-selected professional library. Do not say to yourself that you can not afford to buy books—it is not a question of affording it—you can not afford to be without them. One of the most prosperous men I know in the profession for a physician, living in a small city, assured me that in the earlier years of his work he deliberately spent all his extra income for some time on his library, and had upwards of three thousand dollars so invested before he owned a foot of ground or a home. Be studious in the books of medicine and the allied sciences, but do not neglect the greater book of nature and the more won-

derful book of human life, and in the end you must inevitably measure up to the standard of a man in your profession. The successful physician must necessarily be a close student of human nature—see it in all its varying phases—in low-neck as well as in short sleeves—after all you can but be forcibly impressed that “a man’s a man for a’ that”—there are, perhaps, only a few general patterns from which the whole mass of humanity were cut. All of us, with rare exceptions, enjoy the seductive self-flattery of being different from other folks, and yet humanity is pretty much the same wherever we go—it is chiefly the difference in the attire, mental as well as corporeal, I mean.

The personal character of the medical man should like a woman’s, be above reproach. When the delicate and confidential relation the doctor sustains to the human race is considered, it is superfluous to state that within the sacred portals of the profession there is no appropriate place for the drunkard or the debauchee. Speed the day when public sentiment will be educated to the point where uncleanness of personal character in physicians will cease to be tolerated and meet with as ready condemnation at the hands of the public as surgical uncleanness is appropriated by the profession to-day. And not only should the personal life and character of the physician reflect the virtues of a true man, but his influence, public and private, should ever stand for the elevation of the individual and the uplifting of the race. It was the immortal Gladstone, who it seems in the midst of a wonderfully varied and busy career, took more than passing note of everything and every influence affecting humanity, it was he who said some years ago that it was the lot of the three learned professions at various stages in the evolution of society to dominate and control the destinies of the race. He referred to the age in the past when the church was the supreme dictator in the affairs of men; later came the period when the legal profession were the chief arbiters of the course of events, humanly speaking, and now, he declared, we were entering the period in the race history when the influence of the medical profession would become the dominant one in shaping the course of human thought and actions. Be this as it may, there unquestionably rests to-day upon the membership of our profession tremendous responsibilities coupled with magnificent opportunities to serve the cause of humanity.

The profession at no time in its past history, has been so actively in earnest in its efforts to prevent disease as it is to-day, and I really believe it is a fortunate thing,

for both the people and the doctors, that the ranks of the profession are so overcrowded, there being at the present time in round numbers more than one hundred and twenty-five thousand practicing physicians, or about one to every six hundred of population in the United States. About three thousand die annually, while the output of graduates each year from the medical schools is probably quite double the losses by death. The scientific principle of "selection" and "survival of the fittest" operating here in my humble opinion to the betterment of the grade of professional service rendered the public, and to the uplifting and advancement of professional standards. During the past fifty years there has been a steady advance in the recognized value of human life and we may reasonably hope this will continue. The battle cry of the coming century will be preventive medicine, and a more active effort than ever will be made to keep people from getting sick rather than neglecting them until actually ill. The educated classes of society are daily growing more anxious to have the benefit of competent professional advice as to how to keep well. And notwithstanding the ever-increasing activity of the mercantile houses who prepare our pharmaceuticals for us, I think the coming doctor will give and his patient take far less medicine than we make use of to-day. With this I trust we shall also see on each vaunted specific a government stamp and the exact formula of the contained remedy. A more active and successful warfare will be waged against infective disorders, the public health service better and more efficiently organized than now, and the general diffusion of sanitary knowledge more general than at present. All this advance on the part of the people will only add to the responsibilities of the members of the medical profession. The advance guard of this work must be led by us—where we lead the way they usually follow even though we at times do think it is at a too great distance.

While it is an ideal relation, for both doctor and patient, for every family to have their own special medical adviser, to whom they go for advice, (and a relation I trust your influence will ever be to foster and upbuild,) yet it is well for you to remember, as the doing so will save you many an unpleasant pang or uncomfortable twinge in the cardiac region, that there are everywhere a considerable number of people who, despite the very best and most capable service you may be able to give them, will change their physicians almost as often as they do their collars and assuredly with as few compunctions of conscience. Such

individuals remind one of the Irishman who when declaiming loudly as to the rights of Irishmen without imparting very much information as to just what were their rights, was interrupted by a stranger and asked, "What is it your countrymen want?" Pat's reply was, "We don't know exactly what we do want, and by the powers we are bound to have it." If you have a patient of this type, (and you will have,) do the best you honestly can for him and on the first opportunity turn him over to the tender care of some other doctor who will in due turn probably pass him on, like a coin of doubtful genuineness, along the line to the next man.

A talent for keeping the mouth shut is an essential to success in the practice of medicine. Taciturnity is a strong point with men in our calling; in no vocation does golden silence command a higher premium. There are physicians of moderate intelligence and lighter equipment who, nevertheless, have made with their patients and the public quite a reputation, largely because they know how to hold their tongues. Shakespeare must have had the silent doctor in mind when he said he "knew of those counted wise for saying nothing." The advice of the old dominie to the diffident young curate, to "wear a long black coat and keep his lips shut," has helped many an honest, but not too knowing doctor, out of difficulties. diagnostic, prognostic, and otherwise, and I may add, with equal pertinency, has never resounded to the discredit of even the most learned of our guild.

Medical men are, of necessity, the trusted guardians of individual and family secrets. In your college days anatomy may or may not have been your strong point (to those of you who expect to practice in North Carolina I trust it was your strong point), but in actual practice you will not need the osteological knowledge of a Holden, a Gray, a Morris, or a Gerrish, to diagnose the skeleton in the closet of many of the families you are called to minister to. Remember, always gentlemen, that this grinning, rattling, mouldering relic of social disintegration should never be by you exposed to the public gaze. Be oblivious to its presence, and the families will soon learn that you are a man to be trusted, which will go very far to assure your success. It is well to exercise a guarded reserve as to the ailments of your patients, no matter what the character of their illness may be. Guard well the secrets of the sick room and of the consulting room, and refuse to discuss the details of your cases with the prurient-minded curiosity and scandal mongers who ever lie

in wait at every corner for the talking doctor.

There are physicians imprudent enough to express opinions of cases they have never seen or examined, and to allow themselves to be interrogated about sick people of whom they personally know nothing. I merely refer to this to severely condemn it. The most skillful physician, with the fullest opportunities for thorough investigation may, and at times does, make mistakes; none are infallible. Make no statement, even privately, of professional opinion until you have examined the case to your satisfaction. Leave the diagnosis of diseases unseen, as well as the prescribing of remedies at long range, to the quack who treats by letter, or to the enterprising pharmacist who is only too often ready to adapt a drug to a distant case, with perhaps as much certainty of the result as would the tailor fit a coat to an unmeasured and an unseen man or this line of pseudo-professional or pseudo-ethical action might be respectfully referred to the obliging doctor (is he an hitherto un-named specimen of the *genus quack*?) who off for a week's rest from the onerous duties of his practice or sanatorium which by mathematical count allowed him when at home just three hours and nineteen second per week for rest and recreation, gratuitously prescribes for half the people he meets *enroute*, and nearly all of them in the house where he sojourns, to the delight of the other boarders who cheerfully pay the full modicum of flattery—the only recompense he asks, and to the disgust of the hard-working local profession who can but feel their esteemed visiting confrere has permitted his vanity to filch that which has enriched him not and by just so much impoverished them. In the same connection it is, perhaps, superfluous that I should add that you should never comment upon the work of your rival practitioners. Even kindly references to them are often misconstrued by their friends to mean something utterly different from what was said or intended. Generally speaking it will be the safe thing to do, to never refer in any way to your brother practitioners, and when you have anything to say about them say it to them in person. There may, and occasionally will, be times when considerations for the public welfare and a due regard for your professional or personal honor, may compel you to dissent from the opinions of your brother physicians. Such occasions are to be regretted and avoided if possible; and when otherwise to be forgotten as soon as possible. Nearly all of the suits for malpractice have grown out of what has most often been some hurriedly formed and has-

tily expressed medical opinion. In the great majority of cases such actions should not be encouraged, their causes as a rule being really groundless, and I believe it really the wiser course for the profession to pursue to altogether discourage, so far as lies in their power, the bringing of such actions at law, save in very exceptional instances.

You will pardon me if I raise my voice to warn you against allowing your practice to be too much influenced by what the proprietary medicine vender may tell you in the frequent visits he makes, or in the wonder-worded circulars his enterprising house will almost daily mail you. These gentlemen (and I have as an almost invariable rule found them personally worthy of the appellation), should always be received courteously, and, if you can spare the time, patiently listened to, but it will be well to accept, *cum grano salis*, the Munchausen stories they retail as to the miraculous results attending the use of X.'s new Z. P. Compound in the class of diseases prevalent in your vicinity. The prescribing of this class of nostrums so extensively by the regular medical profession has almost destroyed the vocation of the scientific pharmacist and been as well one of the greatest menaces to real therapeutic progress. In your practice, at least in the earlier years, adhere more closely to the teachings of your text-books, and to the best of contemporaneous journal literature, and as your professional experience ripens it will be a far more valuable one than that of the practitioner who, vainly sacrificing both principle and experience on the altar of being considered up-to-date, prescribes what the last "drummer" sampled him with until a new one comes. As to the matter of giving certificates to drug-houses, it differs little what the assets or the antiquity of the house are, it is hardly necessary to say to you that while you will from time to time see some honored names of the profession commercialized in this shameless way, and that too I fear by consent, yet there is a sober, common sense principle entertained by the men of our profession who really cherish for the profession itself a regard not wholly measured by the dollars and cents they get out of it, that stamps the doctor whose name they see so frequently paraded in connection with a certain special preparation as a man not wholly to be relied upon. Of course, so long as there are trout to rise there will be fishers to throw flies, and the credulous, the ignorant, the men and the women who want to be deceived, the despairing who grasp at every straw, will exist until the coming of the millenium de-

monstrates, that through the succession of ages the suffering of innumerable human units has perfected human nature; but gentlemen, as members of the medical profession, as earnest seekers after scientific truths, let me insist that you do not aid those who paying cheerful tribute to the father of all liars, fatten and grow rich on the credulity of the doctors and their long-suffering patients.

The studious conservative physician will be ever on his guard to investigate critically all new methods of treatment, but he will not be carried away with a senseless enthusiasm over every new method or remedy brought to his notice; bearing in mind that all new things are not necessarily improvements upon the old, and remembering too that at periodic intervals certain much-vaunted cure-alls appear and run the gauntlet of professional favor, only, as a rule, to be hurriedly retired to make room for the next new favorite. Then too, while we are not a bit proud to admit it, it is an undeniable fact that there is such a thing as fashions in medicine and even fads as well; witness, as pertinently illustrating this idea, favorites of the past decade or so, the Bergeon, the Edson, and the Koch treatment of phthisis pulmonalis, and the notorious Brown-Sequard Elixir which was to be a veritable realization in modern life of the far-famed spring for which poor Ponce De Leon searched in vain. All things claiming to effect a cure or arrest, or otherwise calculated to exert a favorable influence upon the course of disease are worthy of and should receive the attentive consideration of the careful physician, but the doctor who bears the remotest relation to King Solomon will not go about the country heralding them as life-preservers until he has had ample opportunity afforded for such investigation personally, or for examination of the work of others who have, as will demonstrate conclusively and beyond the possible peradventure the validity of the claim.

And while on this theme, I may incidentally suggest for your thoughtful consideration the idea that while the advances along the line of chemistry, of physiology, of pathology, of biology, and of surgery, have been something positively enormous within the past two decades, yet I am constrained to say that in the department of pure therapeutics, the real advances have been far less. Now that the triumph of surgery over practically every tissue and organ of the human body is complete, may we not reasonably hope that the earlier years of the new century will bring a revival of interest and investigation along the lines of medicinal treatment with the result of bringing

medicine proper as distinct from surgery up to its place beside the latter?

The intimate personal contact with all classes and conditions of society enjoyed by physicians with the resultant opportunities to study the varying phases of social and economic relations will in certain men, the bent of whose inclination leads them to study on this line, make of the observing doctor an expert on such matters. Occasionally too there will be calls for him to use his energies and his knowledge in the field of practical politics. And while both as citizens and doctors we are proud of our illustrious Benjamin Rush, who signed the Declaration of Independence at Philadelphia, and our own Ephraim Brevard, who also signed it at Charlotte a year and two months earlier, both famous in their chosen profession of medicine, as well as possessed of and exercising political genius of a high order, of the famous Italian Senator, Semmola of Naples, world-wide famed as an eminent man in medicine, of the grand old man, Rudolph Virchow, whose genius shines alike resplendent whether he be viewed as the man who laid the foundation of the cellular pathology and maintained for more than thirty years the first position of living men as authority on pathology, or as the great leader of the liberal party in the parliament of the German empire, of the gallant soldier-doctor, General Leonard Wood, whose famous "Rough Riders" will go down in American history along side of Jeb Stuart, Joe Wheeler, and Phil Sheridan, and many others we could mention; yet the fact remains that, as a general rule, the members of our guild who eschew the responsibilities and the honors of politics are wisest. The story of the school-boy who being asked why a man could not have two wives at the same time replied, "Because no man can serve two masters," is, perhaps, applicable to the doctor who permits himself to become infected by the wiley microbe of the desire for political preferment. To all rules there come exceptions and there are times when the doctor like other citizens must lay aside his own work and assume the leadership of certain political affairs in his place of residence or his country. One of the best Mayors the thriving City of Charlotte ever had was one of her most prominent physicians, a lineal descendant of Ephraim Brevard and a worthy bearer of his honored name. The Mayor of my home town is a promising young disciple of Esculapius, who bids fair to prove himself an equally good Mayor.

But there are certain magnificent opportunities afforded us to shape public senti-

ment along lines the consummation of which may mean far more to the welfare of the race than all that the politicians and place-holders may, can, or will do, for humanity in the next generation. I refer to the influence we should strive to wield against the mental and moral maladies that poison the human intellect and damn human souls. One of the first things on this line of thought to which I wish to invite your attention is the great danger and grave consequences that follow the indiscriminate prescribing of certain classes of drugs, to-wit: alcohol, morphine, cocaine, and their congeners. Each of those mentioned I regard as not only valuable in the extreme, but really absolutely indispensable, and it is not their proper, legitimate use I decry, but only their abuse. If you really love your race you will order this class of drugs with circumspection and honest fear. Over and over, again and again, you will be importuned to order these drugs for weak people who do not need them, who can not be trusted with them, and who ought not to have them with your professional sanction. Be men; do your duty; let your influence go for the right, and you can not regret it. But be the cowardly luggard who gives way and orders for his patient what he thinks will please him, and you will likely live to see victims of the drug habits laid at your door.

Again as physicians, as philanthropists, there are phases of the personal morality question where your influence should be wielded for the right. Leading up to a brief reference to this, permit me to refresh your minds as to the time in ancient history when every prolific Roman mother received her civic reward, and she would exhibit her children as did Cornelia her twelve and proudly say "these are my jewels." Five hundred and twelve years elapsed from the foundation of Rome before there was a divorce case, and then the divorcer was pursued by the contempt of the populace until his death. In that age nothing withstood the onset of the Roman legions; Rome ruled the world, but in the days of Julius Cæsar childlessness became prevalent, the family institution fell, divorces were given on almost any pretext, and measures to prevent conception and criminal abortions became fashionable practices. National sins begot national woes; the Roman empire overrun by the northern hordes, literally perished for lack of men. Polybius, the historian, wrote that the downfall of Greece was not caused by wars, but chiefly by a repugnance to marriage and a reluctance to the rearing of large families caused by too high living. That

which caused the downfall of Rome and of Greece, may yet be the potent causes which shall destroy free America if some of the so-called progressive tendencies of the times go on unrebuked and unchecked.

Every man actively engaged in the practice of medicine has more or less frequent instances of wives made sterile, their health more or less seriously injured by the licentiousness of husbands who regard the seventh commandment as obsolete. With this knowledge before us can we afford to quietly ignore the social evil? Shall we merely rest content by declaring it a necessary evil, uttering no word of warning, making no effort to stem the black tide of disease and death, of sorrow, suffering and crime, or shall we like men meet the grave responsibilities of the hour? An eagle stole meat from the altar of the gods but took with it a coal of fire which utterly consumed her nest and its young. The medical profession, who are priests at the altar of public health are derelict in their duty if they stand idly by and see these wrongs continue without crying out against them. Suppose the great Jenner had said "small-pox is a necessary evil and I will not seek to deter its course?" So in the presence of this great moral evil let us not say there can be nothing done. Personally I believe it is the duty of all physicians to urge upon fathers the importance of inculcating chastity in the minds of their sons as do the mothers with their daughters. To decry that double standard of morality which prevails in society regarding the licentiousness of the young man as venial, while it brands his sister who lapses from virtue's high estate as an outcast never to be forgiven; to lose no opportunity to impress upon young men the true horrors, the loathsomeness and the perils of prostitution—these are, in my humble estimation, some of the duties we owe society and ourselves.

There are numerous other themes I would like to dwell on were the time at our disposal this evening, but I must pass them by referring but briefly to the highly important financial side of the practice of medicine.

Let me say that, in my opinion, the average medical student is possibly drilled a trifle too much in the grand idea of a noble profession which, like the pelican mother, gives its life-blood to succor the race. "The laborer is worthy of his hire," and to no laborer does this more aptly apply than to the skilled labors of the competent physician. Cultivate from the beginning of your professional careers, a careful attention to the business side of your profession. Keep your accounts correctly, but do not keep them too long—collect them.

Send your bills regularly and collect from every one able to pay you. There will still be left an ample and a properly legitimate field for charitable work—do not hesitate to enter it; there is an obligation resting upon us all to help our suffering fellow creatures. It is all very euphonious when a doctor dies to prate glibly of how he refused nobody, but gave freely of both his time and means to succor the helpless and died a bankrupt and in debt, leaving a destitute family to be thrown on the cold charity of the world. I have stood by and seen this more than once, and I ask you if the doctor who does it is measuring fully up to the standard of duty, responsibility, and of opportunity afforded the doctor of modern days. I think not.

In conclusion, gentlemen, I trust this home-spun discourse of mine has not been wholly wasted upon your "too diligent ears." The practice of medicine is neither a series of steps up Parnassus, nor a highway to the stars, but a simple and at times a rugged pathway along the uneven surface of everyday life. As you walk and work this way, not as tramps seeking something for nothing, but as ministers to human suffering, earning by good honest work the wages you receive and ever striving to better those around you. Be not misled by rose-colored anticipations and do not forget the rewards of duty well done are full and beatific compensation to him who in life's afternoon recalls the incidents of a life well spent in humanity's service. The physician may not soar into the empyrean with the poet, or scale the lofty peaks of thought with the philosopher, and it will be but rarely his to attain great riches or immortality of fame, yet when the "sunset gates unbar" he may stand crowned with ineffable glory as one who loved and served his fellowman along the oftime painful line of duty. And now, gentlemen, I thank you for the pleasure of seeing you this evening, and may each of you be in your future professional life all that your teachers, friends, and well-wishers here this evening hope for you.

Natural Labor.

By H. Plummer, M. D., Harrodsburg, Ky.

My remarks shall apply to natural labor, and I may say a few words as to the treatment following labor.

The obstetrician must ever be ready, willing and waiting, for you know not when the "son of man" may call for you and arouse you from your slumbers to come at

once and attend his wife who is now in labor. He assures you this case can not be put off, for she will not, and can not wait.

Be ye, therefore, ready. The question has been discussed pro and con as to what should be done upon arriving at the bedside of your lying-in patient.

It is admitted, without discussion, that there are degrees and different ways of preparing your patient. If I arrive in time my usual custom is to wait for a few moments, and to ascertain as best I can the severity and frequency of the pains. I then call for a bowl of clean warm water and a towel, and proceed to clean my hands, after which I take from my grip a jar of vaseline which is mixed with ten or fifteen drops of pure carbolic acid to the ounce, and a few drops of oil of bergamot or some other oil to destroy the odor of the carbolic acid. I then oil my index finger of either hand as the position of the patient may indicate, and proceed to ascertain the position of the child and to what degree the labor has reached. In the mean time find out if her bed is properly prepared and if she has on a clean gown, for that is all she really needs on her person at that time. Everything proving satisfactory, the presentation being normal, &c., I then give instructions to have plenty of clean hot water convenient, and I proceed to prepare my ligatures for the cord, the thread being taken from a spool which I carry in my grip for that purpose. I put them in a convenient place with my umbilical scissors and then try to make myself comfortable and watch the progress of the labor. As the head is being born I am careful to pass my finger around the child's neck to see if the cord may be wound around it. As soon as the head passes I raise it and with it assist in elevating the shoulders over the perineum. As soon as the child is expelled I mop off its face, removing any mucus that may be in its mouth and then proceed to ligate the cord, always tying it in two places. I pass the child to the nurse and very soon, in a reasonable length of time, I proceed to remove the placenta. During the time I keep one hand over the fundus of the uterus kneading it all the while, and introduce two fingers of the other hand and hook in edge of the placenta and remove it as soon as possible. After the uterus is cleaned I keep my hand over the locality for some time to see that the organ remains well contracted. I call for a clean cloth and some cold water and apply it to vulva and allow it to remain for some time, which is followed by cloth saturated with spirits of camphor or whiskey. Should there be a great amount of blood following, I give a

good stiff toddy. I most always give from a half to a teaspoonful of fld. ext. ergot immediately after the child is born, sometimes waiting till placenta is delivered. I will now allow my patient to rest. The next morning she must have one-half ounce of ol. ricini with 8 or 10 drops of turpentine mixed with it, and to be repeated in six hours if it does not produce purging. Instruct nurse to remove all soiled clothing from the bed and person, and keep bowels open. Allow but little company, if any. I never use the post partum douche unless I think it necessary, and I judge of that by the flow. Should the flow diminish too soon or become offensive, then washing out the vagina and probably the uterus with disinfectants may become necessary. Each individual case must be attended to according to the requirements. I prefer that my patient do not use but little, if any solid food until after the third day. When they want to relieve the bladder or bowels, I insist that they get up and use a commode if they can possibly do so. If not able to be assisted out of bed then use a bed pan.

It is possible you may have some of the following named diseases to set up after even natural labor, viz.: Hematuria, pyosalpinx, a septic vulvitis, vaginitis, endometritis, salpingitis, ovaritis, peritonitis, lymphangitis, phlebitis, pleuritis, pneumonitis, etc. But the most common complication is child-bed or puerperal fever, setting up a few days after confinement. As to the latter I must say that I know but little from practical experience, having never treated a case during my thirty-seven years experience. I have had cases where there was very great soreness of the abdomen, and for this I use hot turpentine stupes for a few hours. But I am aware that puerperal or lying-in fever is a frightful complication to treat. It requires close attention, good nursing and proper treatment. You will allow me here to make some quotations from a paper read by Dr. Cowles before the Section on Obstetrics and Diseases of Women at the forty-eighth meeting of the American Medical Association at Philadelphia, May 1-4, 1897. He speaks more especially of puerperal infection and its treatment. We shall assume the privilege of quoting some of his suggestions, as we think them rather remarkable. We take it for granted that he has prepared his lying-in patient with all the ablutions, etc., because he says:

"That if the obstetrician is not sure that the nurse knows how to scrub out and disinfect the vagina thoroughly, he should do it himself, after all hair has been removed from around the vulva, and order antiseptic

pads changed *pro re nata* or frequently, both before and after the completion of labor."

You observe the doctor is talking about labor and the treatment following labor. Again he says:

"While I do not use the intra-uterine douche, as a routine measure, I know of no good reason why it should not be done. Besides the hot uterine douche assures good uterine contraction, and I believe it is but a question of time, until this excellent prophylactic measure will be advocated ex-cathedra, as correct practice after every delivery. Until then I shall consider that the surgeon is a step in advance of the obstetrician."

Again he says:

"In case the genital tract has been infected, I am an earnest advocate of early and very careful curettage and swabbing of the uterine cavity with iodized phenol, without irrigation, but insufflating boric acid and packing lightly with iodoform or acentanilid gauze, or, what I sometimes like better, sew into the cervix one-fourth of an inch glass tube and fill the vagina with iodoform gauze. If infection ensues, it would certainly be proper to inject hypodermically the antitoxin serum appropriate for the preponderating germ present. Failing in this special treatment, coupled with strongly supporting and stimulating general remedies, if the uterus and adnexa are thought to be a hot bed of infection, one would be derelict in his duty, if he did not give the patient her last chance by removing them, and I would most earnestly urge the vaginal method where possible, as causing less shock and securing better drainage."

I allude to the quotations for the benefit of my intelligent professional brethren. The article may be familiar to you all, and I hope you may see proper to discuss his treatment. I must admit that I feel incompetent to do the subject justice. I am satisfied that he belongs to the Four Hundred, you be careful how you criticize. I claim that for a man to do good work as an obstetrician, or in any other branch of medicine, he should have a good knowledge of anatomy, physiology, therapeutics, &c., good judgment, a fair amount of "horse sense," steady nerves, discretion enough to know what is necessary to be done and proceed to do the work. Ask no questions and allow no one to interfere with your work. For a doctor, in the sick room, should be absolutely boss, and monarch of all the surroundings.

One word more. In my grip, which I call my obstetrical bag, I carry the following named articles, viz.: Three pairs of

obstetrical forceps, one blunt hook, one perforator, one bottle chloroform, one bottle good whiskey, one ounce fluid ext. ergot, three drams sulphate quinine, one bottle bichloride tablets, one ounce tinct. opii, one ounce pure carbohc acid, one jar of ointment for use on finger and instruments if required, one spool of strong linen thread, one pair of umbilical scissors and one pair of good ordinary scissors, a few curved needles and needle holders, a set of perineal needles and some good strong silk thread, one soft rubber air cushion, one roll of anti-septic gauze.

I am now thinking of having my grip enlarged, and if I conclude to adopt the treatment of Dr. C., I will be forced to put in an extra pocket large enough to hold a good size nice, clean negro barber, that he may be convenient to shave the vulva and Mons veneris, on short notice.

This grip may be a little heavy, but we shall be able to set it up in our buggy if we can not slip it under the seat.

This armamentarium may then be considered complete.

The Obligations of Humanity to the Medical Profession.

By Benjamin K. Hays, M.D., Oxford N. C.

When aroused from sleep we are never certain of the exact moment at which we lost consciousness.

So it was with the world.

She only remembered that for a long time she had slumbered, a time commonly spoken of as the "Dark Ages."

She had a vague recollection of a man named Marcus Aurelius, and at a later period she remembered that things were going wrong at her beloved Rome, but after that, all was blank.

Suddenly, after a thousand years of night, she was aroused by the light of day, and turning to her stupor she remembered that she had been dreaming. Her mind was mystified by the name of Dante, and she was filled with stupid delight and astonishment at the works of Raphael and Michelangelo.

Was it the roar of Edward the III's cannon at the battle of Crecy that disturbed her, or was it the clank of the printing press announcing that henceforth the path of learning should be opened to all?

Of what significance, she queries, is the little instrument called the mariners com-

pass, said to have been recently invented by one Flavio Gioga of Naples?

You say that it alone has guided men around the Cape of Good Hope, and opened up the wealth of India to the merchants of Western Europe, and that by its use a wool merchant's son named Columbus has discovered a new continent across the Atlantic?

But who is this man Luther who is creating such a furor among a peaceful people, and why does the doctor priest Copernicus leave his patients and neglect his sermons to get himself laughed at by saying that the earth goes around the sun when everybody can see that the sun goes around the earth?

And so the world continues to doze and dream for three centuries, when the shriek of the locomotive causes her to start with a bound, and look about, still stupefied and astonished to see what has happened.

The forms of government have been changed. Human liberty is fast becoming universal, and great institutions of learning have sprung up in every corner of the civilized world.

These institutions are filled with men prosecuting new and original lines of thought. The results of their investigations are given to the press, flashed from state to state and continent to continent, and utilized by eager and inquiring brother investigators before the brain of the original discoverer has had time to cool.

The great Edison said to a friend of mine that when he first read of the Roentgen ray he was incredulous. Nevertheless he went to his laboratory, locked himself in, and began an investigation. As the truth of the discovery became manifest he worked with increased interest. For forty-four hours without food, drink or sleep he labored, and at the end of that time, when he sought a place of rest, he was absolute master of the subject.

Knowledge is thus increased by geometrical progression, and as a result, men now living have seen greater progress in the world than was seen by all the long line of their progenitors. We have already observed in a general way what this progress has been. We will not stop to consider the influence of railroads and steamships, the manifold marvels in electrical appliances, the inventions in machinery which have revolutionized trade and agriculture, the discovery of explosives which has made war between civilized nations well nigh impossible—but content ourselves with a discussion of the progress in medicine and an inquiry into its effects upon humanity.

Let us face the question with candor and

discover if possible if the medical profession has been of real service to mankind.

We confess with humility that medicine, like theology and physiology, has been dominated by ignorance and superstition. The laws of nature have not been understood, and the benignant influence of the *Vis Medicatrix Naturæ* has been more frequently antagonized than aided. When, in former years, the patient recovered, it was often in spite of, rather than the result of, treatment, but the kindly intentions of the physician were recognized, and so long as he continued to administer medicine he remained a beloved member of society.

Even to this day the belief is so deep rooted in the minds of the laity that pills and powders are a *sine qua non* to convalescence from disease, that I have known of more than one instance where doctors have been dismissed and their pay refused simply because they did not give the patient medicine.

Personally, I can say that I give fewer drugs than any physician with whom I come in contact, and it is a source of congratulation that in some instances I have influenced professional brethren to use less medicine than was their former custom.

Rational medicine is a new art whose one object is to assist nature in her efforts to restore the patient to health.

In another generation I hope to see an intelligent laity recognize the placebo of the homeopath and the suggestion of the Christian Scientist as well as of the hypnotist, as a legitimate part of the regular physician's armamentarium.

If the intelligent physician of to-day has learned to rely upon nature for the cure of many diseases, he has also learned when and where to lend a helping hand.

He stands ready, armed with knowledge, remedies and instruments, that would have seemed miraculous to the physician of one hundred years ago.

Who can estimate the amount of suffering saved by chloroform and ether? Which of us would have the temerity to continue in practice if deprived of his hypodermic needle or clinical thermometer?

What shall I say of the revelations of the microscope? It has given us the science of aseptic surgery, bacteriology and preventive medicine. Listen to the statement of the great English surgeon, the late Lawson Tait, of Birmingham: "During his pupilage in Edinburg he saw thirty abdominal tumors removed without a single recovery. If he saw an amputation of the thigh on Wednesday there was a strong probability that the following week he would see the bare bone sticking through the anterior flap. If a

breast was removed, an erysipelatous reddening would very probably occur on the following day, and would be half way round the chest before the week was out, and the wound gaping and everything going to the bad."

Compare this condition with work you see daily here in your hospitals, where erysipelas, suppurating and gaping wounds would be regarded as criminal; where the wound of the aseptic knife is painless from first to last; where the patient who has undergone an amputation is practically well in eight days, in fact has never felt sick nor had a degree's rise of temperature, and then ask yourself the question, has aseptic surgery been of benefit to humanity? The advances of bacteriology and pathology have been of equal service though less apparent to the casual observer. Moreover we believe that surgery is almost a perfected art, as indeed did Ambroise Pare, who in 1579 wrote that posterity had "small hope to add some things." But no matter what the future of surgery may be, we feel sure that bacteriology and pathology are yet in their infancy.

What then may we not hope to realize from these, young gentlemen, by the time we have reached our three score years-and-ten.

Is it not reasonable to hope that tuberculosis, which now destroys one-seventh of the human race, will have become a thing of the past, and cancer will have ceased to be the *bête noire* of civilization?

The promises of the future are too great for us to contemplate. Who would dare to fix the limitations of that most hopeful of all the departments of therapeutics—serum-therapy? Yet in its infancy, it has reduced the mortality of diphtheria from 40 to 8 per cent., robbed hydrophobia of its terrors, and even promises to wage triumphant battle against typhoid fever.

These, gentlemen, are a few of the many recent advances in medicine which suggest themselves.

In this connection compare the course of training of the medical student of to-day with that of forty years ago.

Then it was two years at college carelessly spent by the youth just from the plough handles, or, if he had first read Wood's Practice under a preceptor, the second year was deemed unnecessary. It is useless for me to remind you what a diploma from a reputable college means to-day.

First the student must have a good English education and a fair knowledge of Latin and Greek. Then for four years he must labor, in the dissecting room, in the laboratories, both clinical and bacteriolo-

gical, on quiz, on lectures, and in his chamber by the midnight lamp. It requires a constant application of brain force,

Further than this, when he enters upon practice he must devote a part of every day to study if he hopes to remain an up-to-date physician. In the face of this revolution in the science and art of medicine and surgery, we are often confronted by the statement that doctors do not cure, and disease still claims its victims among young and old just as in former years.

This statement cannot be answered in a breath. To the victories over death and disease cited above it is of little avail to add that quinine and mercury control two widespread diseases hitherto frequently fatal; that the plastic surgeon has given health, strength and symmetry to many victims of congenital deformity; or to show by statistics that the average length of human life has been prolonged.

There are other considerations of far greater import than any of these. The advances of the nineteenth century have revolutionized the world, and almost every innovation, save those made by medical men, has in itself been favorable to the spread of disease.

Not only do I believe that this spread has been limited by the medical profession, but I am convinced, and it is my purpose to prove, that without the medical profession human progress would cease, mankind would degenerate and actually lapse into barbarism before the close of the twentieth century.

To this sweeping statement many will say that ancient cities and empires with immense populations flourished without the aid of medical men, and the Renaissance of modern Europe culminated in a high state of civilization at a time when medicine was still a crude art. This is true, but no other age in the history of the world has been exposed to such dangers from devastating and demoralizing diseases as the present.

The great epidemic diseases of the world have been stamped out by sanitation, hygiene, quarantine and the other departments of preventive medicine.

This has been the work of medical men. It is true that much of it is now done by the sanitary engineer, but it is also true that it was the medical profession which first created a demand for the sanitary engineer and his knowledge of the laws of health has been acquired either directly or indirectly from medical men.

Let us review briefly the history of the world's great epidemics, and then imagine, if possible, what these might be if still permitted to prevail with the present methods

of travel and increase in urban population.

Small-pox and cholera were unknown in ancient Greece and Rome. They were not endemic there and no intercourse being held with countries where they were endemic they had no opportunity to make an appearance. Small-pox is thought to have been first introduced into Europe in the second century by a Roman army returning from Asia. It spread rapidly, carrying death and devastation wherever it appeared. From the time of its first royal victim, Marcus Aurelius, to that of Jenner, it continued to be the scourge of Europe. It is estimated that during this period, one-tenth of all the deaths of Europe were due to small-pox. Many who survived the disease were unfitted for the ordinary vocations of life, while one out of every three persons was disfigured by its scars.

When introduced into Mexico by the Spaniards in 1520 it is said to have carried off 3,500,000 of the inhabitants in a few months' time. Catlin writing in 1841 of its effect among the American Indians said: "Thirty millions of white men are now scuffling for the goods and luxuries of life over the bones and ashes of twelve millions of red men, six millions of whom have fallen victim to the small-pox, and the remainder to the sword, the bayonet, or whiskey."

In 1734 two-thirds of the inhabitants of Greenland were swept away by this disease. In India it seems to have appeared every seven years. In repeated outbreaks in China it destroyed from one-tenth to one-third of the inhabitants. Fearful as were the ravages of small-pox, it was less fatal than the bubonic plague. This most fatal of all great epidemic diseases first appeared in Europe in the sixth century and prevailed for about fifty years. It is said that "cities were devastated, the country converted into a desert, and the wild beasts found an asylum in the abandoned haunts of man."

It made a second invasion of Europe near the middle of the fourteenth century, and in a period of five years claimed 25,000,000 victims, or one-fourth of the entire population of the continent.

In Green's history of England we read: "The sheep and cattle strayed through the fields and corn, and there were none left who could drive them; harvests rotted upon the ground, and fields were left untilled. Of the three or four millions who then formed the population of England, more than one-half were swept away by its repeated visitations. Its ravages were fiercest in the greater towns, where filthy and undrained streets formed a constant haunt for leprosy and disease."

From the fourteenth to the eighteenth

centuries plague continued to ravage the great cities of Europe, hardly one of which escaped repeated visitations in which more than half of the inhabitants fell victims to the disease. The London plague of 1665 was the fifth or sixth visitation which that city had experienced. At that time the city contained less than one-half million of inhabitants, two-thirds of which fled for their lives. Of those remaining 70,000 were cut down in a few week's time.

The security which modern hygiene, sanitation and quarantine afford, make it impossible for us to contemplate the horrors of this disease. There were times in the history of almost every European capital when the living were unable to bury the dead.

Of less importance than plague and smallpox is Asiatic cholera, and yet this disease in the present century has counted its victims by millions in oriental countries, and has occasioned no small alarm by its appearance in Europe and America.

Typhus, relapsing and yellow fever have slowly and reluctantly yielded to the force sanitation has brought to bear upon them, while typhoid still lingers to remind us that our sanitary practices are yet far from perfect.

Since epidemic diseases played the greatest havoc in cities let us consider the size and number of the world's great cities now and formerly.

During the past four hundred years the total population of Europe has increased about four hundred per cent. It is a notable fact that this increase has been chiefly in cities. London and its suburban towns now contain more inhabitants than could have been found in all England at the time of Henry VIII. At that time there was hardly a score of cities upon the globe containing 100,000 inhabitants. The population of London in 1665, the year of the great plague, was 460,000. Only a few other cities in Europe contained so many people, and these were separated by a distance which at that time required weeks to traverse. There were no American cities at that time, and the cities of the East were proverbially far distant from those of the West. To-day there are not less than three hundred cities of 100,000 inhabitants, while as many as a dozen may be found with upwards of a million.

They are in daily, and many of them in hourly communication with each other. The methods of travel are such that a patient may be made almost as comfortable when flying at the rate of sixty miles per hour as when lying in a hospital.

Up to the present century the most

rapid means of travel was by horse-back—the usual method was by stage coach on land, and sail boat on sea. Thirty or forty miles was a good day's journey, and when night came the traveller was worn and exhausted. To cross the Atlantic or double the Cape of Good Hope required months of weariness and hardship.

An army crossing Europe on foot moved with almost the same rapidity that a traveller could attain when pushing forward with greatest haste.

It was at this same speed that the fearful epidemics ever and anon spread throughout Europe, usually following in the wake of armies or other moving bodies of men.

If smallpox appeared in a city, those fleeing from it could travel only a few miles a day, while there was no possible chance for the victim himself to stand a journey to a distant city. If a plague ship left a port in India the disease had done its dreadful work and disappeared long before the white cliffs of England gladdened the hearts of the surviving passengers.

How different is all this to-day. Fancy a person with smallpox landing in New York and proceeding unrestrained to San Francisco. In six days time he has infected hotels, waiting rooms and sleeping cars from ocean to ocean. In less than a week the different people with whom he has come in contact have visited every town and village in the United States. The inhabitants of these, unprotected either by vaccination or sanitary methods of living, would fall an easy prey to the disease, and in a short time millions of cases would prevail.

Suppose the plague now prevailing in Honolulu were to have the same free range formerly given it in European cities, and the inhabitants of this little cosmopolis, fleeing in their demoralization, were to be permitted to land and mix with the people of this country and in Europe, carrying, as they certainly would do, the disease wherever they went. Suppose the many cities into which the disease was introduced should be as foul as the cleanest European city of three or four hundred years ago. Under such circumstances it cannot be questioned that plague would soon become pandemic in all the continents of the world, that every city would become a hot bed of pestilence, that commerce, agriculture and manufacturing would cease, that immorality and religious fanaticism would prevail, and pandemonium be transferred from chaos to the desolated habitations of man.

I do not believe this picture to be overdrawn, nor do I hesitate to affirm that the

emancipation of mankind from just this condition has been the work of the medical profession.

From time immemorial self sacrificing medical men have plead with individuals, with municipalities and with State authorities for sanitary reforms. The indifference and oftentimes open hostility with which these pleadings have been received are too well known to require mention. And yet, slowly and reluctantly the reforms have come, and modern civilization has been made possible. The future holds a greater work for us than has been accomplished in the past.

Typhoid fever is a stain upon our civilization. It must be stamped out. So with many other diseases. To do this we must educate an unwilling public, even though it deprive us of our daily bread. And for this work of the past, which is still going on, and will continue to be carried on in the future, I hold that humanity is under some slight obligation to the medical profession.

Whooping Cough.

By J. A. Reagan, M. D., Weaverville, N. C.

I have been practicing medicine a long time, and I have tried nearly every preparation recommended, and am satisfied that, in my hands, most have been a failure. I see in the Journal of May an extract by Dr. Kerley of the trial of different medicines in the treatment of this disease, and from his conclusions I infer he has been disappointed in most drugs recommended for this trouble. As I said, I have tried all and more than he mentions, and confess I have been disappointed, but for the last thirty-five years I have used the following with success:

R Alum finely pulverized, 3i
Strained honey, 3iii

M. Thoroughly.

Sig. One teaspoonful every hour, when awake, whether they are coughing or not.

To show the result, a lady from Mississippi in coming to Asheville, some years ago, her nursing child caught the whooping cough. When I saw her she was very sad, and said to me that her child would die. To cheer her I laughed at her and told her I would insure its life for 10 cents. I then gave her the above prescription. The next time I saw her—some ten days after—she was cheerful, and said, doctor, you saved my child. It never whooped but twice after I began using the prescription—it is well. I

have used this, in hundreds of cases, invariably with success.

While I am writing I will give you my treatment for measles. After the war I hired a returned soldier, as my negroes were all freed, who had the worst cough I ever saw following the measles. I tried every thing recommended, and nothing seemed to do him any good. I then took the buds of the common Balm of Gilead, made a strong tea sweetened with honey, and in ten days he was well, and the cough never returned.

I then began to reason *a priori*, and concluded that if this would stop a cough, which followed measles, by using it in measles I would prevent a cough following the measles, and from that day I have invariably used it in that disease, and am glad to say that, notwithstanding I have passed through three regular epidemics of measles, I have not had a single instance where a cough has followed, when this remedy was used, by myself or others.

The Physician and the Manufacturer of Pharmaceutical Preparations. Ethics of their Relation.*

By M. L. Stevens, Asheville, N. C.

So intimately associated are the professions of Medicine and Pharmacy, and so mutually dependent each upon the other, that the success of neither can be said to lie entirely within itself. The best physician can get but ill results from unreliable drugs, or from preparations of which he does not know all the ingredients and the exact amount of each. So, too, the most carefully prepared pharmaceutical product will fail of good if unskillfully prescribed. Two professions so intimately associated—so closely allied, in fact, that the one may almost be considered a part of the other can spend profitable thought on the ethics of their relation.

I do not know whether there is extant a code of rules for regulating the relations of these professions or not; nor is it my purpose to furnish one. But we all know the fundamental principle of ethics as embodied in "As ye would that others should do unto you do ye even so unto them." This is the sum and substance of all codes, and to reduce it to a set of rules detracts much from its beauty and adds nothing to the clearness of its meaning. So without further discussion and without fear of excep-

*Paper read before the Buncombe County Medical Society, May, 1900.

tion being taken to such position we assert that no new principle of ethics is involved in our relation with the manufacturers of our prescription requisites.

Special proficiency in one of these professions does not imply ability in the other. The practitioner of medicine is not a pharmacist. And the pharmacist is not a practitioner of medicine. The various states recognize this when they enact laws which debar the physician from practicing pharmacy unless he be also a pharmacist. And the pharmacist from practicing medicine unless he be also a physician. So these professions do not overlap each other. Each has its limitations.

In the light of these facts and of facts that are matter of daily observation with us all, it is at once apparent that the field of legitimate medicine is being overrun in all its parts by our sister profession; and that there are daily flagrant and gross violations of pharmaco-medical ethics; that many of the pharmal establishments, large and small, are not actuated in their dealings with us by ethical motives; that they are not according to us that fairness that they would have us accord them. With many their profession has degenerated until their calling has become a trade. And business competition, greed and presumption have led them to usurp also the office of the physician, as Pope says:

"Modern 'Pothecaries' taught the art
By Doctors' bills to play the doctors' part,
Bold in the practice of mistaken rules;
Prescribe, apply, and call their masters fools."

For every ill of life they put up their own prescriptions to be administered on their own or their patients' diagnosis. They manufacture products for "physicians' prescriptions only," but so soon as the physician by his prescriptions has introduced the preparation they advertise and sell direct to the public. They manufacture those many and marvelous compounds of well known drugs which come from their laboratories with formulæ bearing no hint as to the quantity of some of their components, but all so "scientifically combined" as to have special curative properties for the large class of ailments for which they expect us to use them. And their knowing traveling representative, who perhaps has never seen the inside of a medical college or of an authoritative work on Therapeutics, loaded with samples and self assurance visits our offices, and inflicts upon us, if we will permit him, ready made lectures on the cure of disease—I say cure of disease. For who ever heard or saw an unfavorable report of a case treated with their preparations. Indeed it would

seem that their clinical reports would be enough to cause the undertakers to begin to look for other occupation. "Their money buys the advertising pages of our best medical journals" and through them they offer for our use preparations of which not a single ingredient is made known, but which they with their superior knowledge (?) of the treatment of disease would have us believe are the sine qua non for the successful treatment of the maladies for which they are intended. And of course they see no reason why we should know what we give our patients.

Now I would not be understood as condemning all medicaments the manufacture or sale of which is controlled by one firm. Many prescription necessities are or have been manufactured under patent or protected by trademark and yet come to us without secrecy as to any of the components, or of their quantity. Patent, copyright and trademark may involve a question of ethics between manufacturer and manufacture, but not necessarily so between manufacturer and physician. It is to the secret, the semi-secret, and the multitude of highly advertised new preparations, concerning which we have no positive knowledge that I would specially direct your attention, and also to the efforts of commercial houses to control us in our profession.

P. T. Barnum used to say, "The American people like to be humbugged," and Lincoln said, "You can fool all the people some times." Evidently these tradesmen think the American doctor likes to be humbugged and they can fool all of them sometimes. Indeed it would seem that the credulity of the public in regard to nostrums and cure-alls hardly exceeds that of many in our profession in regard to these so-called panaceas offered for our prescriptions.

The eminent Dr. Huxham writing a century and a half ago, remarks that "From the days of Galen, and indeed before, vain hypothesis, the love of novelty, the fashion and faction of Physic often led its professors devious and attached them to error. And it is too well known the same misfortunes still attend us." In our day it is equally true that whatever is new, be it ethical or unethical, receives too much attention from our prescriptions.

But it is a pleasure to note that here are yet pharmal establishments that hold dear the honor and dignity of their profession and who know the limitations of their calling. Who manufacture no nostrums. Who do not in any way usurp the office of the physician or try to direct the medical profession in their work. Whose preparations are put up with full and open formula on

every package. Whose publications are always welcomed by us. Who are doing unto us as they would have us do. We must be equally fair with them. If we are we will at all times specify in our prescriptions the product of their laboratories instead of that of the unethical firms. We owe it to our patients, to ourselves and to these manufacturers to specify. It is a duty of common ethics. This is not a new theory that I am here advocating. Our medical code specifically calls upon us to exercise our option as to where our prescriptions shall be sent in order that we may thereby discourage apothecaries from vending unethical preparations or being in any way engaged in their manufacture and sale.

According to Bacon every man is a debtor to his profession. A debt that we owe ours is to free it from the influence of commercialism.

In conclusion I would summarize as follows:

The manufacturer of prescription requisites, and the prescriber of them, each has his own legitimate field.

No new principle of ethics is involved in their relation with each other.

The province of the one is being usurped by the other, and the courtesies and amenities which should obtain between them are by many manufacturers entirely disregarded.

There are, however, ethical pharmacal establishments.

It is our duty at all times to specify their products in our prescriptions, as a just discrimination in their favor and against unethical concerns.

This evil has attained such proportions and is still growing so rapidly that if we would not degenerate into mere functionaries of commercial houses, to be needed only for finding diagnoses in doubtful cases, our local and general medical associations will have to take discreet and decisive action.

DISCUSSION.

DR. PEAVY.—I have not thought of anything in connection with the paper that I could add to it. It is certainly one of the live subjects that should engage our consideration. I think there is a strong disposition among manufacturing pharmacists to make advertising agents of the medical profession, and the thing has become rather nauseating in the way they have worked us. I do not object to those put up preparations with an open formula. I consider that they are legitimate products, and we are doing perfectly right in prescribing them. But I think some times we ought to be careful in using their proprietary names,

even when they are not secret preparations, because there is sometimes a purpose on the part of the manufacturer to make the physician advertise it by using the proprietary name and get it before the public that way.

DR. McBRAYER.—I enjoyed the paper very much. It is timely and to the point, and the doctor stated facts and stated them tersely. If there is anything I dislike being bored by worse than another, it is the drummer. Some of them are nice and others are otherwise, but that is not what I wanted to say. I think we doctors make a mistake—I do for one—in allowing our patients to know what we prescribe. The doctor remarked in his paper that as soon as the manufacturing pharmacist had his product introduced by the physician he then advertised it broadly and sold it as much as he could. To prevent that, it seems to me, that if the doctors would absolutely refuse to allow the patient to know what they are taking it would obviate that feature, and beside that, it is none of their business what they are taking. If you have to discuss with your patients whether or not they are going to take a certain thing you had better let them treat themselves and be done with it. It is a mistake that is often made by all of us. I know I do it oftener than I ought. I was in consultation, a short time ago, and the husband of the patient named over everything his wife was taking, and I was in consultation again in the last week and the lady knew everything she was taking, and knew it too well, and I suggested to the doctor that he give her the medicine and not let her know what she was taking, so when we went back to the room I made some remarks, and told her the doctor was going to give her a capsule and I thought it would do certain things, and she said, "Is it such and such a drug, doctor?" and I said, "Madam, that is none of your business. The doctor knows what it is and so do I, and that is sufficient." It has a better effect, and would obviate that one trouble the doctor speaks of. We would be advertising the manufacturing chemists product.

DR. FLETCHER.—This is a thing that I have thought of a great deal. I think the doctor is in a large measure responsible for the number of products put upon the market. If we did not encourage these people they would stop coming around, and we are not only doing ourselves injustice but we are doing wrong to the local druggist. Take the emulsion of cod liver oil, for instance. To be sure most of us could not write a prescription off hand for it, but there is not a man, if he went back to the books, could not make a better prescription and a

cheaper one. Take Scott's Emulsion. It is an expensive article, and a very good one I dare say, and there is not a man in the house who has not prescribed it, and we do not know what is in it. It not only gets the doctor in the habit of not thinking, but he loses his knowledge of pharmacy and medicine. I do occasionally use these things but I use them less and less every day. I may not give as palatable a mixture as some, but when I give a drug I know what is there. The druggists in this town have to keep at least seventeen emulsions of cod liver oil, and half the time when the patients get it it is old stock. As many visitors as we have, and as many people who take it, one man will prescribe one emulsion and another one another. It is not just to the patient. Take the three chlorides. The knowledge of pharmacy of any man who cannot write a prescription with the three chlorides, with a vehicle, is running to seed. For my part I do not often prescribe any of these things, especially if they have a patented name. I think it is a very poor judgment to do it, even although, as Dr. Peavy says, it is right. It will be so after awhile that a competent druggist will not need to have a competent man to put up his prescriptions, and he will not have them. The supply always meets the demand.

DR. STUCKLEY.—I am very glad to be with you tonight, but I regret exceedingly that I did not have the pleasure of hearing the paper, but I judge it is an old subject, one which we have had before our local society at home, and I am free to confess that there are pros and cons on this question, and that the cons are very greatly in excess of the pros. The question in my mind that causes the greatest alarm, is not primarily that the patient is not the greatest beneficiary, but that the doctor does himself the greatest harm. I am a firm believer in that law that self-preservation is the first law of life, and equally does it apply in the application of drugs. Let us look at it from a strictly unbiassed, unselfish view. A com-dound brought in to you. A patient comes into your office and you examine him and say he needs a nerve stimulant. You give him an infusion, not taking into consideration one moment the drugs entering into its make-up, or the physiological action or therapeutic effect of the drugs entering into that combination. I think the greatest argument against it is that we become careless, get into grooves, and lose our faculty of making combination of our own, and above all we lose those fine points of the physiological effect of drugs and their application. It leads us to deal in complicated medication, not with the simplest dosage,

but that we get into the habit of giving a combination of things, and losing all knowledge of the effect of individual drugs and the application. I acknowledge that I have been a victim of this, and am to a certain extent. But as one of the gentleman stated, I find I am getting further and further away from it every day. We know that our druggists are complaining. We know also that many of us have just cause to complain of our druggists. We know that with certain reliable houses there is a certain guarantee of efficiency, there is a certain guarantee of attention to detail as to the purity of the drugs. Last December, while I was in New York, I was introduced to a gentleman, who I was told was the greatest herb importer in this country. While at the table he made this remark: "Do you know that there are six grades of senna, and do you know that all the best senna in this country is sold to patent medicine men?" It surprised me, and I thought that was a great reflection, not only upon the integrity of the mercantile houses of this country, but was a reflection upon the profession, and indirectly upon the patient, because we did not know and had no way of knowing, from our lack of pharmacology, etc., as to the strength of drugs. We have no standard in this country like they have on the continent or in England. There is no law governing it. So to correct this thing primarily we will have to go to the very seat of our materia medica, break open the pharmacopeia and bring it to a recognized standard, and let the laws be so constructed as to require all preparations to reach this standard. We know that every drug house in the country is trying to get out some speciality. I believe every druggist is entitled to a living profit. I believe that profit should be a good profit, just as I believe that every doctor should have a good fee, and I believe the way to bring up this standard, and retain our own self-respect, and above all our knowledge of the action of drugs, is to make our own combinations, write them in full, and patronize those druggists whom we know are honest and dealing fairly and squarely with us.

DR. REAGAN.—A great many of those preparations we use are like an old doctor I knew 52 years ago. He went to a patient and examined him. At that day and time physicians made their own medicines, and if they had a surplus they threw it in a bottle, and that was the case with him. After he had examined him he said: "I don't know what is the matter with him," and after studying he said: "I have a bottle at home; I don't know what is in it; it has a little of everything. I will get that and

perhaps there is something in it that will fit the case." That is about the way a great many of those prescriptions are made. Then there is another thought in connection with it. I wrote an article once in a Philadelphia journal on the great necessity of physicians understanding chemicals, so as not to give compounds whose chemical actions would change those medicines. I remember a case of an old physician, now dead, who had given a patient some castor oil and then a quantity of soda and then some turpentine. He said to me: "What composition would that make in the human system?" I said: "It would make a very good article of soap." Unless we understand something of the chemical action of one drug upon another we might be very much confused and very much disappointed in its action. I think, with the paper and the remarks of the doctor, we ought to have reliable druggists, and I believe we ought to write our own prescriptions. I believe that is due us and due the druggists. A great many of these manufacturing establishments have some preparations that are protected by law on their formula, and they tell us what is in it, but do not tell us the proportion of those things, and I am honestly of the opinion that we depend too much upon those manufacturing chemists. Some of them understand the action of medicines one upon another, and make very good preparations, and give the exact amount in each case, and where that is the case, if it is fresh we ought to use that prescription, but how do we know they are fresh. As the doctor says, they sometimes come through as they go in. I recollect a case of a man who had taken those patent pills for years, and finally he took cramp, and they tried every way to relieve him and by a heavy enema they washed out half a teacupfull of those pills. I could cite a good many cases on that line, but I do not want to occupy too much time.

DR. C. P. AMBLER.—I believe we are in a great measure responsible for what has been brought about. I think it is deplorable that the profession to-day has got to be troubled by the traveling quack doctor. There is hardly a day but some bright young man pushes his way into your private office and wants to give you a discussion on what his drug will do. Of course he has been thoroughly posted as to what to say. I think it is an insult to the profession, but it is out fault. If we were not ready to listen to them they would soon find they had no business. I think we all ought to take a firm stand on this. I make it a rule not to talk to them during office hours. I have a boy who is pretty intelli-

gent and can size them up pretty well and if they come into the office with a satchel during office hours it is his business to inform them that I cannot see them then, and I am hardly ever in my office outside of office hours. Another thing is that the doctors are so ready to give testimonials for proprietary medicines. The pharmacist has found out if he can get an advertisement of a certain number of men upon his article he is going to sell it. It simply means that the rest of us follow like sheep. If doctor so and so, who belongs to some big medical college will endorse an article and sign his name, some of the rest of us will be sure to use it because a certain man says that in a certain case it has been beneficial. I know our druggists are getting in a great predicament. They are getting their shelves full and losing money on it, and it is our fault. They do not want this stock, but they have to keep it because the physicians are using it, and as long as the physician prescribes it the druggist has to keep it. I believe those two facts, that we listen to the traveling vendor of medicine, and in the second place, that so many are willing to give endorsements to proprietary medicines over their signatures, is the cause of the fact that so many are forced upon us.

DR. MORRIS.—I have not anything particularly to say on the paper because I did not hear it, but along the line of Dr. Ambler's remarks I would like to make a statement. I do not think, with Dr. Ambler, that we ought to kick these fellows out of our office. It is true they have not studied the physiology of drugs, nor the therapeutic action of same, but they are usually clever fellows, and some of them do travel for reputable drug houses, and after all we cannot manufacture drugs, and very few of us know too much of chemistry. I do not think we lose anything by being courteous to them, if we see them at all. I certainly believe we should not take these written formulas they get out and apply these compounds simply because they are said to be good for certain conditions. I think we ought to have intelligence enough to make our own combinations to write our own prescriptions and the combinations we think best and from which we believe we can get the best results, we can see these fellows away from our office hours if we do not want them during office hours, but we ought to be courteous to them.

DR. AMBLER.—That is just the point, if we are going to cater to them we will have more than we want, and I will warrant if the Christian scientists and the faith healers and mesmerists will get out runners and go

to the doctors and show them wherein they can do better, the doctor, if they can convince any doctor, or the average doctor, that they can assist and benefit him, and can bring things about in that way, if the doctor will listen to him we will not only have traveling quack doctors but we will also have men coming around to try to dictate to us as Christian scientists and faith healers. I do think too much of my time to spend it in that way. I am very glad the doctor said what he did, because he clinches what I have said, that the reason we have these men is because we are willing to give them time, and time is money and knowledge, and if we cannot get knowledge from somebody who is not entirely ignorant of what he is dispensing, we are going to a poor school for our knowledge.

DR. MORRIS.—I believe the doctor will admit that I did not advise seeing these fellows for the purpose of gaining knowledge, but I said if I did see them I would see them courteously. It is for us to decide whether we will see them, but that is no reason why we should abuse them. That is not the way to remedy this, and if we want to write our own combinations we need not listen to them. It is supposed we will have sense enough to know what to accept and what to reject. Even Dr. Ambler himself, I think, can do this.

DR. FLETCHER.—There is one point in the paper which has not been discussed. The doctor mentioned the fact that we took up these articles and prescribed them, and then after the doctor wears them out the laity takes them up. The druggist is going to prescribe it after awhile, and as a matter of fact you cannot say anything. We ought to be able to give preparations for less expense, a better article, and more profit to the druggist, than to make him keep that kind of stuff.

DR. E. B. GLENN.—I notice the line of the discussion has been that more harm has been done the druggist and doctor, and less said about the patient. I think more harm is done to the patient by giving these proprietary medicines, especially gelatine coated pills, than to the druggist or the physician. I remember seeing a case where the patient had been taking pills for several months. And when the stomach was opened for a gastro-enterostomy there was at least a handful of pills, so I feel that he failed to get the physiological action of a preparation that was sought. Take the coal tar products; we can get original products without these trade mark names, and the patient pays less for them. I think that any preparation changed in name increases

the cost of the medicine by having to pay for a name given by a monopoly to such preparation. The first thing to be considered is the patient, then the doctor, and then the druggist comes in. Of course, I think the undertaker is left to wait in that case.

DR. SAWYER.—I am guilty of using these proprietary medicines now and then, but I try to confine myself to the few good ones. A great many of them are no good, and I think that the general train of the discussion to-night is right. We undoubtedly use too many, but I have been like Dr. McBrayer, trying to reduce the number and simplifying my prescription by using original drugs.

DR. AMBLER.—Suppose we could get every doctor in town to band together and say they would not listen to the traveling man's story regarding his proprietary drug, and should adhere to that for several years, wouldn't it be a fact that at the end of a year or two we would not be bothered by the enterprising drug man who is trying to enlighten us as to the great benefits to be derived from the special way of preparing some prescription.

DR. REYNOLDS.—I think the physicians are partly responsible for the great use of these proprietary drugs. I think the shoe fits the druggist as well. The druggist continually complain of the physicians prescribing them, and not having an originality, etc., etc., yet in nine cases out of ten, and a man goes to a druggist and says he has this, that or the other, the druggist will tell him what will relieve him and sell him some of these proprietary drugs. It simply amounts to this: The physician makes the diagnosis and these proprietary men and druggists do the rest. We get the consultation fee and they get the bill for the drugs. It seems to me the druggist is just as much at fault as the physician. As far as Dr. Morris is concerned, it is something like the Bell and the Asheville telephone. All the doctors in town agreed at one time to do away with the Bell telephone and take the Asheville telephone. There are still one or two hanging fire, and using the Bell. If all the physicians banded together and every one turned down these men it would be all right, and you would have a grand result as far as being bothered, and as far as having the town flooded with these proprietary drugs is concerned, and that should be the case. But there are a few doctors who will take anything in the way of an advertising medium, and I think we have come to a low ebb when we entertain these men wholly as an advertising means.

Ophthalmic Economics.

By Edward W. Wright, M.D., Brooklyn, N. Y.
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County Medical Society, Member Oph-
thalmological Society of Great Brit-
ain, Oculist Bushwick Central
Hospital, etc.

Economics is the science that treats of the production and preservation of wealth, and the methods of living well for the state, the family and the individual; or, as it is commonly used, the science which treats of man's temporal well-being in its widest sense.

Undoubtedly our eyes are one of the elements of our capital, and they are most certainly important factors in man's temporal welfare; so it cannot be an over-refinement to have as one of the subdivisions of economics—Ophthalmic Economics.

Vision is of paramount importance for man's well-being, and the means and methods of its use are of essential value for his happiness and success.

The converse is evident. Poor vision, or blindness, retards materially his advancement, and militates against an enlarged sphere of successful action.

Consequently, the study of ophthalmic economics will tend to reach the highest goal of production, preservation and use of good vision.

In a short article, we can only deal with a fragment of the subject.

In the practical application of economics, the great aim is to secure the highest results at the lowest cost. In ophthalmic economics, the desire is as great. Among other details, this necessitates a careful auditing of the expense account. Rigid economy, consistent with efficiency, must be at all times maintained.

In the use of the eyes in mechanical, literary and professional pursuits, the demand on the two focussing muscles must necessarily be great. Likewise, the constant efforts of the extraocular muscles which cause each eye to look at the same object at the same time, must also be very great.

The adjustment of these fourteen muscles for the most efficient service must be intricate. Not only must the arrangement of forces be accurately governed, but the action must be continued for long periods of time. In reading, writing, sewing, printing and such like duties, these fourteen muscles must be continuously acting.

The nerve force or energy to control this

muscular adjustment and its maintenance is a measure of the expenditure which the eyes cost the nervous system. This cannot be tabulated in figures or units; dollars or volts. The excessive expense is often recorded by the severity of the fatigue or eye-strain; by the degree and number of the headaches; by the inability to continue the use of the eyes, and by vertigo, nausea and insomnia.

Farsighted eyes will expend little nerve force to view objects on the sea or farm, but they require a large amount of nervous force to supply the muscles when they are used at the desk of the school or the office. Astigmatic eyes, handicapped by their structural defects, are forced to spend an excessive amount of nerve force at a decided disadvantage, in executing the demands made upon them in reading, writing, drafting and sewing.

Then again, some eyes are governed by muscles which do not act in harmony. One muscle or one pair of muscles may be over-acting; another muscle or pair of muscles may be under-acting. The muscles of convergence may be unable to fulfill their whole duties for several hours each day. The nervous energy supplying these muscles is used with a marked waste. The co-ordinating centres are disturbed and deranged, and much nerve power is lost. Economy is not observed. Wilful waste is present.

To diminish this excessive expenditure and maintain it on a normal basis is to aid the farsighted in their near work by the wearing of properly selected spherical glasses. To lessen the waste of nerve force and place it on a legitimate basis is to correct the defects of the astigmatism by the wearing of properly ground cylindrical lenses. To curtail the costly disbursement of nervous power in the maintenance of the extraocular muscles, we must primarily correct the errors of refraction of each eye, and then proceed by other ways and means to bring about a harmonious and economical action.

In short, then, we reduce by these methods the heavy taxation levied on the nerve supply given to the muscles of the eyes. This economy cures the headache, the vertigo, the sleeplessness and such kindred conditions.

Let us now proceed still further in the consideration of the influences which an excessive expenditure of nerve force to the eyes may have upon the general nervous system. In nervous cases of functional character, the drain upon the nervous supply is often the cause of the neurotic state. If we can lessen the nerve expenses

by any means, we give the patient a greater reserve of capital. In recurrent hysteria, the loss of self-control is frequently due to a great loss of nerve force, either from a sudden shock to the nerve centres, or by a gradual diminution of the supply of nerve force. Neurasthenia, or nervous prostration, or the many varied forms of functional neurotic conditions are very frequently but the manifestations of a state where the trial balance shows an expenditure in excess of the income. In all these nervous cases of definite or indefinite type, it is incumbent on the thorough physician to increase, by all ways of living and means of medication, the income of the nervous system, and never to forget the equally important duty of reducing the disbursements.

One of the many extravagant expenses may be found in the nerves governing the muscles of the eyes. It is difficult to measure, in terms, the amount of nerve force the use of the eyes requires. We know that there is no set of muscles in the whole body requiring such delicate and exact co-operation. We observe at once that the right hand can be used while the left is at rest; that each ear is a distinct entry from the other; that one vocal cord may pass the median line to meet the other and produce a good tone. To have each eye view the same letters and the same figures at the same moment requires an adjusting mechanism that must at all times perform its full duties accurately and definitely.

In the varied duties demanded of the eyes, it is not so much the delicate picking and fine selection of the different muscles required to act to make both eyes see the same object at the same time, as it is the keeping-up, the maintenance of the exact nerve force that drains and exhausts the general nervous supply. It is the combined co-ordination of the nerve centres for adjustment, and the great outlay of nerve power required for continuous work, that diminishes and depletes the nerve energies.

When the eyes are normal, the nerve supply is generally sufficient to carry on the duties of the eyes without an appreciable effect upon the general nervous capital; but when the eyes do not act normally, owing to some error of refraction, they demand an exorbitant supply from the general nervous fund.

If we correct the errors of refraction, we take the first step in reducing the waste these eyes cost the general nervous supply. By this economy, we increase the general nervous capital. This reduction of expenditure is frequently made manifest in the

betterment of the patient's general condition.

It is not claimed that this readjustment of the nerve expense of the eyes will cure these functional nervous conditions, but that it is conserving the nervous energies, and helps the family physician materially in his aim to permanently place the patient on a solid basis. Fortunately, the economy enforced in the eye account is often sufficient to give a decided impetus to the improvement of the patient's nervous system.

The gratification to the oculist in bringing relief in some cases of functional nervous disorders and neurasthenic conditions may cause his zeal and enthusiasm to override his discretion. He might think, as glasses have given such marked aid in some nervous cases, and as tenotomy has given decided cures in headaches, that tenotomy may cure all the symptoms of functional nervous and neurasthenic conditions. He must ever bear in mind that there are other expenses on the general nervous income beside the eyes. When he has prescribed the proper lenses, adapted them to the eyes and trained the muscles, he must wait until the influences of the glasses and the muscle training have had time to produce an economical habit; wait until the other expenses have been curtailed or cut off; wait until the effects of general medication and proper living have helped the general nerve supply to reach a higher state. In short, the general practitioner and the oculist must each remember that the expenses are many. The duty of the oculist, to curtail the expense of the eyes; the duty of the physician, to curtail the other expenses—both to act in concert.

So much has been written and spoken on the influences of partial tenotomies, the nibbling or button-holing of the extraocular muscles, that a physician who has not given careful and exhaustive study to the question is at a loss to know positively the value of such operations. The influence of the effects of glass in cross-eyes or squint is so evident that it must seem to the casual observer that the cutting of a few muscular fibres, which will form a scar tissue in a few days, is of very insignificant value. It is quite different when a complete tenotomy is done by severance of the muscle attachment within its capsule. When the oculist and the physician confer together, when the proper glasses are worn and the muscle systematically trained, then the already very low percentages of tenotomies in functional nervous cases will be still lower.

In the examination of eyes for refractive errors, it is not a popular statement to recommend the use of a drug that will dilate

the pupil and incapacitate the patient from business for a day or more. It has been taught recently by one or two that the use of a mydriatic is unnecessary. For the ordinary prescription of glasses for headaches and kindred conditions, it is true that in the majority of cases it is not used. In many cases requiring glasses for improvement of vision, it is not necessary. But for a full examination of eyes for aid in the treatment of functional nervous cases it is wise in most cases to use some derivative of belladonna. The liability of spasm in nervous cases is so great that a wrong beginning may be made, and the subsequent results greatly impaired.

This method causes a loss of one day or more to the eyes of the patient for reading, etc. This is no greater than the necessity for examination in surgery or medicine under an anesthetic. Thoroughness must be the first factor. The results prove the wisdom of a thorough examination. Thoroughness must prove more effective in the end than popularity. If we desire to economize, then we audit the account perfectly.

The patient is apt to think that the eyes are not factors because he can see the standard lines at the standard distance, and can read the smallest print. The physician may not be aware that the eyes cause any excessive expenditure, because the patient makes no complaint about the eyes, or because there are no subjective symptoms apparent. Yet in many cases, on complete examination, sufficient evidence can be found to prove the presence of an excess of nerve force used.

For the saving of the general nerve capital, it is ever conservative and judicious to determine, positively and accurately, the assets and liabilities of the eye account, that any excess of nerve expenditure may be brought to an economical basis.

115 Montague Street.

La Grippe.*

By A. M. Ballard, of Asheville, N. C.

In the very brief space of time that is left me to prepare a paper, I cannot expect to do justice to a subject that has the length and breadth of the one I have selected; but, in a somewhat desultory way, will speak of La Grippe. It has now been about ten, or eleven years, since the announcement was made, that the grippe was about to make a tour through the United States. This announcement was received with a contempt-

uous shrug of the shoulder, by the average American, for the general opinion seemed to be that this foreign visitor was unworthy of attention or respect, and was simply a *plebeian cold* with a few foreign airs or variations. It arrived on schedule time, and by its cordial salutation and business-like methods, soon commanded the respect of the country as a whole, and of those with whom it had personal dealings with in particular, and soon wrought a disillusion regarding its character. Whether it has a consanguineous relation to the epidemic influenza that has been familiar to all for generations past, as some are inclined to believe, I cannot say, further than, if it is a lineal descendant of the old epidemic influenza that killed our grand-parents it possesses greater versatility and power than its immediate ancestor. Its presence is not by any means always easy of detection and it masquerades sometimes in the garb of other diseases. We are compelled to suspect its presence sometimes, because we have to exclude everything else; therefore it has been said, "When you cannot diagnose anything call it Grippe." Each one is dependant for his clinical knowledge respecting this disease upon his own personal experience and observations. I think there is not yet any authority who has in an exhaustive and systematic way made a clinical study of this disease in its different forms, and arranged the symptoms as regards their frequency, or pathognomonic value, in the proper order, showing what is essential and what is non-essential. The information regarding it clinically is in a chaotic state, the fragmentary possession, of many observers in many parts of the country. When order shall have been brought out of chaos then we will possess a clinical picture which will enable us to recognize it more easily at the bedside. The following information respecting its bacillus I obtain from "A Manual of Bacteriology" kindly loaned me by Dr. Paul Paquin:

A bacillus, supposed to be the specific cause of influenza was discovered by Pfeiffer in 1892, in the purulent bronchial secretion, and by Cannon in the blood of patients suffering from "Epidemic Influenza." Morphologically, they are very small bacilla, having about the same diameter as a bacillus of the "Mouse Septicæmia," but only half as long. Pfeiffer infers that this is the specific cause of influenza, for the following reasons: First, They were found in all uncomplicated cases of influenza in the characteristic purulent secretion. Second, They were only found in influenza. The presence of bacilli correspond with the

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cause of the disease, and they disappear with the cessation of the purulent bronchial secretion. Thus in the future the microscope may make it possible to determine the character of doubtful cases. I have become convinced by my observations that the toxin of this disease has been the cause of many obscure cases of illness and anomalous disturbances of the nervous system, and that errors have been made by mistaking some remote effect, on some organ, for the primary disease. I have had clinical evidence to some extent that La Grippe is an infectious disease, and that children are frequently victims of it. The immediate effect of this toxin is always to depress the nervous system. But while the immediate effect is the same in all, the remote effects vary greatly, according to the sex, age and various predispositions. In the same manner as what is commonly called a cold, will produce in different persons various disorders, although on all, the immediate effect is to depress. So, La Grippe may produce at some part of the chain of cause and effect an inflammation of some organ. In one instance of the brain, or its membranes in another of the kidney, and in another of the peritoneum, while in another it will cause paresis or paralysis, of some vital part. This disease has a definite course to run, and during its course it is kaleidoscopic in its manifestations, and frequently has a daily surprise for you, unless you appreciate its nature, and therefore cannot be surprised at anything. The onset is often sudden, although its victim is most generally in a lowered state physically for some time previous. The disease may be arranged in four forms: First, That resembling a general cold, but accompanied and followed by a much greater prostration. Second, A sudden *seizure* upon, and prostration of the brain and nervous centres, which might be called the cerebral form. Third. An attack of pneumonia, followed by a more serious disturbance of the nervous system, than is common to ordinary pneumonia. We will call this the pneumonic form. Fourth, The gastric form, wherein the attack commences with a violent vomiting of green matter, often accompanied with gastritis, which sometimes continues for weeks. Yet there are mixed types, cases partaking of each of the forms I have mentioned; also irregular forms. The seizure begins, sometimes by a neuralgic pain in the groin, testicle or lumbar region; sometimes by a chill, sometimes by vomiting, or by a general eruption of an erythematous character, or by nettle rash, or distressing pruritus of the whole body, or some part. The pulse in some cases is extremely

slow. In one adult it was but 45 a minute, less often it is moderately accelerated; temperature is frequently sub-normal at the start; later, it is often normal; sometimes sub-normal, rarely above 100 or 102. In some few cases (I have noticed it in two) there was a sudden hyperpyrexia, 106 and 107, which may end in death immediately, or return soon to normal. This, I have thought, was due possibly to some rheumatic complication. I have noticed the breath cold, occasionally, are but slightly warm in other instances; pupils do not respond to light; pulse often vary intermittent and irregular; the feeling of prostration is extreme; bowels are sluggish and difficult to move at first, and frequently continues so for some time; the passages are at first sometimes odorless, later may become very offensive; there is a complete arrest of the digestion in many cases at the commencement, and a violent and frequent vomiting of spinach green matter; hicough is not infrequent, and this has continued for several days in cases I have observed; spasm, or imperfect lifting of the epiglottis, rheumatoid pains, generally muscular, profuse perspiration, is present sometimes. In truth, most of the symptoms of sympathetic nerve disturbance. Those symptoms which seem most characteristic are immobility of the pupils, green vomiting, with or without, gastritis, slow or moderate pulse, low temperature, extreme prostration, hicough, agitation, tremulousness of the muscles, somnolence, pruritis. The low temperature has been noticed in the stage of convalescence; the duration of the disease is not determined, but varies much in different cases; convalescence is extremely slow, and is apt to be followed by various sequels, such as paresis, paralysis, chronic debility, tuberculosis. In fact, any tendency there may be is awakened into activity. There seems to be a tendency in the disease to repeat itself at intervals of one or two years, the subsequent attacks occurring on the month, week or even day, corresponding to the first attack. It frequently appears sporadically, and may occur in any season, but occurs chiefly as an epidemic in the fall or winter season, or sometimes in the spring. The general impression that prevailed at one time, that it resembled a cold in all instances, is erroneous. It is probable that the largest proportion of cases are included in that class that I have designated the "First Form," which resembles what we call a "bad cold," but a very considerable number have nothing that would suggest a cold. But all the symptoms attest to a

sudden prostration, caused by some toxic agent.

If the study of "Comparative Anatomy" is desirable, I think you will admit that the comparative study of this same disease, as it manifests itself in the canine species, may be serviceable in this connection. You will excuse me, therefore, I trust, if I refer to "La Grippe" in the dog. There is no work extant on disease of the dog that makes the slightest allusion to La Grippe, for the disease seems not to have been known until within the past ten years, and no work on dog diseases has been lately published, so far as I know. What is called "distemper" of the dog resembles to a considerable extent the canine grip, but yet is quite different, and a much less grave disease. It bears about the same relation to grippe in the canine as a common cold in the human subject does to the malignant forms of this so-called "Russian Influenza" in the human subject. It presents in its two forms the closest resemblance possible to the two forms of hydrophobia, so much so that the question forces itself on me, was there ever such a disease as hydrophobia? Was not that which was called hydrophobia this same disease we now know to be "La Grippe," but occurring sporadically, at long intervals, and in localities widely separated? In the course of years has it not become instead of sporadic, and very infrequent, quite frequent, even epidemic? It has been about eight years since my attention was first drawn to the disease in the dog. For a number of years it manifested itself generally in the following form: The animal would refuse food for a day or two, as though he had lost his appetite, then would seem ill at ease, restless moving from place to place. This restlessness evidently was caused by muscular pain. He will moan slightly at times. We will call this for convenience the first stage. The next day this restlessness is found to have increased. There is now perceived, in some instances, a ropy or tough mucus discharge from the mouth, and not seen in others. There is no discharge from the nose, or suffused watery eyes, as there is in distemper (at least in most cases.) There has appeared at this early stage in one or two instances a sort of paresis, or giving away of one leg, or joint, when the animal was walking or running. In most cases the tongue at this stage becomes much weakened, though this will not be observed without close observation. The dog can go through the form or motion of drinking, but the tongue is weak and has lost its expertness in throwing the fluid down the

throat, and can only paddle in the liquid and *seem* to drink. There is often a great and distressing pruritis affecting the groin, and the poor animal will frantically try to lick the part, and bite the skin, as a dog will do to relieve the itching caused by fleas. This nervous irritation sometimes affects the part near the root of the tail. The lower jaw now begins to lose its power and drops down so the mouth cannot be closed. This paralysis of the tongue and jaw, progressively increases, and the muscles of deglutition soon become affected in the same way. The majority do not appear to be thirsty, but in a few thirst is very great, and in these cases the dog will thrust his head into a tub of water up to his ears in his effort to force water down his throat, or to cool his mouth. The sufferer never sleeps, while the absence of food causes him rapidly to weaken, and he now shows delirium of a mild kind; has hallucinations, walks with a tottering and uncertain gait; yet even in this stage never offers to bite or harm any one. Vomiting occurs frequently at the beginning and during the progress of the illness.

I have frequently administered ipecac or apomorphia early, and it would cause the dog to throw up a quantity of green bile, and often foreign things, as sticks, rolls of hair, straw, pieces of leather, and undigested food that had been taken three or four days previous. We have now arrived at the third day of the disease, and the animal is the picture of abject misery. His physiognomy is changed and he has a haggard and woe-begone appearance. The breath is sometimes cold, temperature sub-normal and the sufferer tries to get near the fire and he can scarcely stand on his tottering legs. On the fourth day, he is still worse, and pneumonia may supervene, on the fifth day meningitis may occur, or in some instances at this stage the heretofore mild excitement may cease, the dog seem once more like himself, so far as the mind being clear. He is weak and cannot rise to his feet. The centres for respiration and circulation undergo a steady weakening. Respiration and heart-beats grow feebler, and more rapid, and the poor animal quietly breathes his life out. The disease in this form almost invariably kills in five days. In one instance I sustained the strength until the eighth day by introducing milk into the stomach through a stomach tube, but on the sixth day pneumonia attacked one side, on the next day the other lung become involved, and he died at the end of the seventh day. Such is the general character of one form of la grippe in the dog, a form which prevailed for several years. The canine

disease pursues a more regular course than does the same disease in the human subject, and proves uniformly fatal with a rare exception in five days. During the past three years there have been many cases (although belonging to the form I have just described) when the illness begins or shows its first signs by a weakness in the hind legs. The dog has difficulty in rising to his feet and shows that he is suffering from pruritus in the groin, and in the parts near the root of the tail. but as the illness progresses it produces the same conditions I have before described, that that is the progressive weakening of the jaw, tongue, muscles of deglutition, &c. In these cases commencing in the posterior part of the body, there has been a complete loss of power to stand, much easier than when the symptoms showed first in the jaw and tongue.

In the second form the power of locomotion is much less affected. The legs hold out until the whole body is exhausted by lack of food and sleep. The dog has a disposition to wonder off, and will go long distances in an aimless manner, with his head hanging down and tongue out. taking little notice of things about him, but finally returning to his home. He is under the influence of a mild delirium, but shows no disposition to harm one. At the sound of his master's voice he quickly obeys, and returns to him. When the disease is approaching, and before there is any suspicion that the dog is otherwise than well, he will sometimes be quarrelsome with dogs he meets, or may be playing with, and will sometimes bite them. This arises from simple irritability, as in the human subject, some will lose their temper on slight provocation, when they are not feeling well, but with that exception he shows no desire to bite. The duration of this form may be a little longer than in the first form, and perhaps is more likely to terminate in meningitis. No treatment has the slightest controlling power, and in whatever form the disease is found, the animal dies in a few days, most cases ending in failure of the heart or respiration centre, without convulsions. In some few cases the special cause destroys life immediately, and the animal sinks in a sudden collapse after a day's illness. The presence in the stomach of foreign substances, as sticks, balls of hair, and other unnatural things, has been considered of great value in a diagnostic way, when the question of rabies arises, and yet, I have repeatedly found these objects in the vomited matter of dogs having the grip. It is difficult to understand how two different diseases can present the same

symptoms, and have the same history. La Grippe may be regarded as a specific disease of the nervous system, invariably fatal in the canine race, frequently so in the human subject, and in the course of which, all the various functions of the body may be more or less abnormal, but I will add, in some of its forms, is so unlike what was formerly known as 'Influenza' as to cause a serious doubt of their identity. I will here speak of the features of resemblance and the points of dissimilarity.

CATARRHAL FEVER

Is essentially an epidemic disease.

It has occurred at all times of the year and in all kinds of weather.

It attacks pre-eminently mucous membranes of nose, eye and bronchial tubes.

In some cases prostration is not so marked.

Influenza is not ordinarily in itself a fatal disease. It is only so in the very young, and very old.

Brain symptoms are present only in rare instances in influenza.

Decided catarrhal symptoms are common.

The almost constant absence of an eruption on the skin.

Its history is not confined to any particular time.

Onset of the attack sudden.

Affecting animals as well as man.

Leaves an influence behind lasting long.

The complications and sequels are few.

LA GRIPPE

Is not essentially epidemic, but found frequently sporadic.

Is only epidemic in the fall, winter and spring, though sporadic any time.

One form only attacks mucous membranes.

In all cases prostration is the most constant and marked symptom.

It is frequently fatal in itself and is equally so at any age.

Brain symptoms are extremely frequent in Grippe.

Catarrhal symptoms are not common and found only in one form well marked.

Eruption on the skin not infrequent.

Its history in this country confined to the last ten years.

Onset of attack sudden.

Affecting animals as well as man.

Leaves an influence lasting a long time.

Complications and sequels frequent.

Thus, it is seen, though showing many points of similarity. The Grippe is still quite different in many essential points and a much more serious disease.

DISCUSSION.

DR. MINOR: I feel myself somewhat handicapped owing to my ignorance of diseases of the dog, and in fact I feel somewhat like quarreling with the doctor in that he has allowed his interest in hydrophobia in the dog to crop into the paper. However, I will make such remarks on the subject as I can. The first thing that strikes my mind is that the interest of grippe to the Asheville practitioner lies in the fact that it is a common disease to phthisis, and it is perhaps now the chiefest scapegoat on which we have to rely. We have no malaria in this country to fall back on, and so when we have a disease we cannot diagnose we call it grippe. I believe I am backed up by good medical authority in making a distinction between a disease called influenza and one called grippe. I think certainly our medical authorities class these together. Although certain cases of grippe and certain epidemics of grippe can have a high mortality, the highest it is ever put down is from one-half to two per cent., and that would not fall in, I think, with the classification of grippe as a separate disease from the disease we call influenza. There is one point that strikes me which every one of us here, even those fond of the microscope, have neglected, and that is the examination of the sputum. It is a very small bacillus, it is true, and necessitates the use of a twelfth oil of immersion lens. I think we all ought to use the microscope more in the future than in the past. I would like to differ slightly with the doctor on his point of diagnosis when he says he would suspect its presence when he could exclude everything else. I am afraid that would lead us into a great many errors. I would not sign a death certificate of grippe when we reach the point where we can exclude everything else and be sure it is grippe. In his classification of grippe, the doctor in certain instances differs from what I am accustomed, in that he speaks of the case as beginning per se as pneumonia. I believe all cases of grippe have a sufficient course to enable us to diagnose the grippe before it becomes pneumonia. In my experience it has always been preceded by quite an attack of grippe before it pronounced itself. The development of tuberculosis after grippe is a thing which is before us all the time here. I suppose there is not a man here who has not taken care of cases supposed to have taken its origin in grippe. My views of the almost universal presence of bacillus in the body, not necessarily active, but the almost universal presence of bacillus in the body would simply, of course, make the grippe a rouser of

the latent bacillus, and more especially because of the weakening of the power of the organism which has held them in check. I think the excessive nerve weakness which follows is much more important than the muscle pains so much relied on as a diagnostic point, the running from the eyes and nose relied than to the course of the fever. I never feel positively sure I have a case of grippe until when it is over I find the typical case of prostration. Then I feel sure I am right in my diagnosis. I have seen lately a lady here from New York with a bad case of grippe, and it was certainly a typical case. It ran through the servants as well as the guests in the house, and unquestionably got milder as it ran, and then I noticed a woman, the mother of a boy, who was employed around the house, while the boy did chores around another house a mile away, and a mild case of grippe developed in people who had been thrown with this boy. We can see very well how, in a town like Asheville, where so many people come, we run upon types like that which we might call a cold or call grippe, but which to our tubercular cases might be dangerous. The doctor speaks of a thing new to me. I have seen a number of people have repeated attacks of grippe, but he speaks of their having attacks of it in succeeding years at the same time, as though it was malaria we might say, as though the bacillus remained latent in the system and developed again. Most of the grippe I have seen, contrary to his experience, has been epidemic. I differ from him in saying it has only appeared in the last ten years. Certainly the authors I have read state that the first epidemic we had in this country was in 1847. I do not believe any of us have been practicing since 1847, but some of the gentlemen have been practicing more than 13 years, and can say as regards that point.

There is one question interesting to me as to whether the grippe the doctor describes in the dog is the same disease, and has been bacteriologically proven, as the disease in man. I do not know about that. I am interested in whether he noticed it appearing in a household where it was present among the members and then developed in the dog, or whether you have seen it pass the dog as immune, but as you say your veterinary authorities do not admit its presence it would be an interesting point to notice. If the disease you see in the dog is the real grippe you would expect to see it run through the dogs of the household. The cold breath you speak of is very interesting to me. I have never noticed it. Since the lungs, even immediately after death, have always a certain temperature,

and while the air that goes in is very rapidly heated up, I cannot see how it is possible for a man to breathe cold breath out of his mouth.

DR. BALLARD: How is it in Asiatic cholera? You will find the breath in some of these cases cold, and in others merging on that.

DR. MINOR: I have never seen Asiatic cholera, but in the average state we know the temperature can sink as low as 94 or 95 before death, but even that would hardly make cold breath, and I think that to feel cold it would have to sink as low as 80.

DR. BALLARD: Before the discussion goes further I would like to say I think the doctor has misapprehended my meaning in one particular. When I spoke of the pneumonic form I simply called it that because pneumonia is a complication. It is always a complication of the grippe when it occurs, and there is a long series of symptoms preceding that, and the pneumonia is a complication.

What I mean by cold breath is that when you put the hand close to the mouth you get no sensation of warmth.

DR. PAUL PAQUIN: I have not had very much experience microscopically with la grippe, more than as a student of the disease. The first investigation I ever made microscopically was some years ago, and the bacillus la grippe as described could be found at times. Since then a great deal of work has been done in Russia, Germany and this country, but I doubt if any one has been really able to establish the fact that the special bacillus found in connection with the disease is the cause of it. It is there, not in every case apparently, but in a great majority of cases, though it has never been identified to the point that we have been able to identify the bacillus of tuberculosis in connection with the latter disease. Theoretically, however, it seems a fact that this bacillus is the cause. Microscopically, for diagnostic purposes, therefore, I fail to see that we can always positively rely upon it. It is a germ very easy to discover when it is present. But sometimes we have no sputum to analyze in the beginning, so that microscopy is possibly not yet reliable as a diagnostic help. In a recent case which Dr. Ballard examined I made investigations for five days of the sputum and the bacillus, which resembled very much the bacillus of mouse septisæmia, was found on the third day. In this case it was only about twelve hours that this bacillus was present. Then it left and the ordinary air germs began to vegetate in the bronchial catarrh. Whether we can, from such examination as that, have any date of

diagnostic value, is to me questionable, because the patient had already been sick two days, and had had a temperature of 102 for twelve hours at a time, and the expectation did not amount to much until the second or third day when this bacillus was found. This was, of course, an isolated case. The clinical picture, I think, is so far the best we have to rely on, and as Dr. Minor has well said, it is frequently after the disease has disappeared that we are satisfied about the diagnosis, and very frequently we treat the patient quite awhile before we are satisfied. A point of interest Dr. Minor has spoken of is the fact that tuberculosis so often follow the grippe. I remember an epidemic which occurred in Montreal, which seemed to attack at the same time horses and human beings, and a teacher of medicine then read a paper before the students, in which he drew parallels between the symptomatic features existing in horses and human beings. I have not seen anything of the kind since. He drew a picture which impressed all the students very much, that the disease in men and beast was perhaps related, although it was entirely theoretical, there being then no bacteriological work. With respect to the same disease existing in dogs I know nothing, but I wish to say that I have seen a number of cases of what we call distemper and hydrophobia, and they are quite different. I had occasion to see some 28 or 30 Russians brought to Paris, who had been bitten by mad wolves, and the symptoms of those who developed hydrophobia were quite characteristic, and different to the symptoms of grippe in man. The cords of some who died were used to inoculate dogs, rabbits and guinea pigs, and they died from hydrophobia without any characteristic symptoms of what we call distemper or grippe. Those cases were brought from Moscow in February, 1886, if I remember well. They were several days on the way. Influenza apparently began in Russia, and a long time before those Russians were brought to Paris. The history of the disease dates back to about 1850. These Russians were brought there by physicians of education who knew what they were doing, and who had evidently seen both grippe and hydrophobia. I contend that hydrophobia and la grippe are distinct diseases. At the same time it is seemingly established that we have a germ in influenza which is found in 92 per cent. of cases. We have not been able to say that it is the cause, because we have not been able to pursue the biological features experimentally to satisfaction, but we have certainly good ground to claim it is due to bacteria

of some kind. I have seen hydrophobia in dogs in Europe. It has no very close resemblance to la grippe or influenza in the canies.

DR. BALLARD: I have nothing further to say except to differ from Dr. Paquin in regard to hydrophobia.

Buffalo Lithia Water.

The attention of our readers is directed to the following valuable contribution to medical literature, by Dr. B. K. Hayes, of Oxford, N. C., which was lately published in the "Virginia Medical Monthly."

The best of all diuretics is water. The safest and surest method of stimulating a torpid kidney to action is to administer large quantities of some water, known by experience to be easily borne and readily absorbed, by the stomach and bowels. The addition of a small quantity of common salt increases the diuretic action of water, but is rarely borne by the stomach.

To avoid the disagreeable effect of salt upon the stomach, the practice of injecting salt solution into the bowel has become very popular in recent years, and numerous observers have testified to the efficacy of this treatment. Dr. Virginius Harrison, in a lecture recently published on "Normal Salt Solution," says:

"Lavage of the blood with the saline solutions in that condition called uræmia has saved lives that seemed almost hopeless. It has improved patients before they have gone as far as the urgent stage. If we have symptoms of uræmia, in the early stages we can do much for our patients; but, as a rule, we do not find out that our patient has uræmia until the kidneys have ceased to act well, and the urea is retained in the system in great quantities, as well as the other toxic elements which go to make up the condition known as uræmia. In the early stages, the rectal enemas may be sufficient to enable the skin and kidneys to eliminate the poison, but in the later stage, either the subcutaneous or the intravenous infusion will have to be resorted to. Two cases of this kind I have treated recently with the salines."

It is a well established fact that many natural mineral waters have a decided diuretic action, even when given in comparatively small quantities. If these waters have specific diuretic action when given by the stomach, I see no reason why they should not act equally as well when given by the bowel.

My experience has been confined to the use of Buffalo Lithia Water, and I wish to

report three cases in which I have used it successfully:

I.—Mrs. A., age 64, was the subject of a long and severe attack of asthma in February, 1899. During this attack it was necessary to administer morphine hypodermically during a period of two weeks, giving on an average about one-fourth grain in twenty-four hours. The asthmatic attack was immediately followed by suppression of urine, and uræmic coma supervened.

The prolonged attack of asthma had left the patient in an exhausted condition; the pulse was intermittent, and the heart sounds were muffled and indistinct.

This condition was regarded as serious, and Dr. T. L. Booth was called in consultation. Drastics were to be avoided. Fearing that morphine was responsible in part at least for the existing condition, we avoided that drug also. Calomel and Rochelle salts were cautiously administered, together with infusion of digitalis and Buffalo Lithia Water. A natural tendency to sweat made it unnecessary to employ diaphoretic agencies. The patient passed less than half pint of urine per day, and the coma continued to deepen. We used lemonade, flaxseed tea, diuretin, etc., to no avail.

On the night of the sixth day, when life had been almost despaired of, Dr. Booth suggested an injection of warm normal saline solution. I made this of Buffalo Lithia Water, and the injection was used at ten o'clock, repeated at twelve, and again the following day. Before the second injection the patient had a copious passage of urine, and in twenty-four hours had passed four pints.

The digitalis and Buffalo Lithia Water were continued by the mouth; the kidneys continued to act freely, and the patient made a satisfactory recovery.

II.—In September, 1899, the same patient again suffered from suppression of urine following an attack of asthma. This time no opium had been used. The rectal injections of Buffalo Lithia Water were used repeatedly, but were not retained. On the third day, when the patient had passed into a state of semicoma, the following treatment was employed:

A drachm of salt was added to one pint of Buffalo Lithia Water and boiled for five minutes. This was injected into the subcutaneous tissue of the hip, antiseptic precaution being observed. In three hour's time the patient passed several ounces of urine, and from that time the kidneys continued to act freely.

III.—Recently I injected a quart of warm normal saline solution of Buffalo Lithia

Water into the bowel of a patient seven months advanced in pregnancy who was having convulsions. The kidneys began to act freely in a few hours, after which the patient was able to take water by the mouth.

I do not think that definite conclusion can be drawn in regard to the action of any remedy which has been used but three times; but when we consider the well-known diuretic action of a normal saline solution in the bowel or under the skin, and the specific diuretic action of Buffalo Lithia Water when given by the mouth, I think it rational to believe that we have a remedy of unequalled value when we make our saline solutions of Buffalo or some other water known to possess specific diuretic properties.

Substitution; Cause and Effect.

In unsuccessful preparation, or one which has not gained popularity with the physician, is never substituted. It is only those articles which have through their merit, won the esteem and confidence of the medical profession and have demonstrated their therapeutic value suffer from this evil. Take for instance, Micajah's Medicated Uterine Wafers, which have stood the test of time and have proven their worth to the doctor as a remedy of exceptional value in the treatment of diseases of women. This preparation was the first local application presented to the profession in the form of a wafer; and should be given the credit for this original and novel form. Solely through merit it has become immensely popular, and, as a consequence, it is most extensively substituted. Therefore, we wish to call our readers' attention to the necessity of carefully specifying "Micajah's Medicated Uterine Wafers" on their prescriptions and insisting upon the same being dispensed, and to the danger of a substitution being foisted upon their patients. Do not be led astray by similar sounding names. To insure results and protect your patient, care should be taken to prescribe the original preparation.

Phosphaturia.

In phosphaturia, Cystogen clears up the cloudy urine, prevents the precipitation of the phosphates, and relieves the drain in the system, at the same time the urine remains normally acid. It prevents the formation of renal and cystic calculi. Give a five grain tablet three or four times a day and drink freely of water. Avoid beer, especially in all irregularities of the urinary excretion.

When your patient cannot retain his urine without difficulty after having been treated for gonorrhea for some months before, and especially if he has a little mucopurulent drop at the meatus on rising in the morning, you know that he probably has prostatitis. In addition to your local treatment (if you regard such treatment necessary), give him five grains of cystogen every three or four hours. This will disinfect his urine and his entire urinary tract, and will cure many cases without local treatment. In obstinate cases, it is wise to milk the prostate every five days.

In all cases where thorough disinfection of the genito-urinary tract is necessary, prescribe Cystogen in five grain tablets three or four times a day. This is specially indicated in gonorrhea in all stages, prostatitis, epididymitis, cystitis, etc.

Suprarenal Therapy in Hay Fever.

Extract of the Suprarenal Capsules is superior to all other remedies in the treatment of Hay Fever. It may be used both locally and internally. Locally it should be applied in the form of an aqueous solution, 6 to 12 per cent. strong, by means of a spray, on pledgets of cotton or by cataphoresis. Internally, in doses of two to three grains, the Extract of Suprarenal Capsules reduces the turbinate bodies, lessens the irritation, stops the sneezing and discharge, and controls the vaso-motor vessels of the nose. The Extract should be given until giddiness or palpitation is observed, or until the nasal membrane shows that the vaso-motor paralysis is under control, when the dose should be diminished. If the disagreeable symptoms reappear, increase the dose until the patient is again comfortable.

The results from the use of Extract of Suprarenal Capsules in the treatment of Hay Fever entitle it to be classified as a specific.

Physicians with patients troubled with Hay Fever should by all means, give them the benefit of the Suprarenal Therapy.

Extract of Suprarenal Capsules in powder and tablets may be obtained from Armour & Company.

"Have you anything to say before we eat you?" asked the King of the Cannibal Isles of the pale-faced stranger.

"I should like to address a few words to you on the advantages of vegetarian diet," was the reply.

Smith—Does your barber talk much?

Jones—Yes, and he illustrates his story with cuts.

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J. C. MONTGOMERY, M. D.

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No. 36 SOUTH TRYON STREET, - - - -

- - - - - CHARLOTTE, N. C.

SUBSCRIPTION. \$2-50 PER YEAR,

THE MINUTE DOCTOR.

Time is money and we spend it like we do the rest of our means, oftentimes, carelessly. My time is my estate and yet we loaf it out hanging around a drug store waiting for a call or a glass of coca cola. And so we waste our money and our estate.

But the minute doctor is always in a rush, he has something for every moment in the day. If he has an appointment at 4 o'clock, he will not be there at 3:45 or at 4:10, but exactly on the stroke of four.

It is refreshing to have a consultation with such a man, he comes in at the appointed minute, gets right down to business and is through in 20 minutes.

Such men are few and far between and after all it is perhaps well that they are.

Punctuality is a virtue and procrastination is a thief, but a clock is a very tyrannical thing to rule over a man. Sometimes we should sacrifice our reputation for being on time because other things detain us, of more importance than our reputation. We know a man or two who are perfect slaves to punctuality. They often neglect their business to get to their meals promptly on time. If they cannot get to church exactly on the stroke of eleven they stay at home and read the Sunday World.

They rush from one patient to another because they must hurry back at the office by a certain time, they fail to attend a society meeting because they must come in six minutes late. This kind of a man usually suffers as much from the relentless rule of the clock, as the procrastinating man does from the drag of the hours. But between the two there is a happy medium if we may but strike it. Not to live on the ragged edge of a minute all the time, but to be careful of the passing moments.

Never try to kill time, but at the same time be careful that it does not kill you. Give all attention to the matter in hand, let the future look out for itself. Do the work before your eyes, if it takes an hour or a day, then go forward to the next. Lay aside the expected duty if the unexpected be more important and never worry about the time, for it is unending.

THE SIGNIFICANCE OF THE APPENDIX.

Most people think that the appendix is a surgical organ whose chief function is to supply material for newspaper articles on brilliant operations by distinguished surgeons. This is a mistake, and while it is not of any particular use, except as mentioned above, it has a rudimentary connection with by-gone days and other animals than man. Comparative anatomy, according to the Pennsylvania Medical Journal, has thrown much light upon this subject, and the function of the organ in its prerudimentary state has been fully shown.

In the capybara, a small animal resembling the guinea pig, the cecum is very much more developed than the stomach and serves as a receptacle or reservoir for the food until its complete digestion. The cecum is also an important organ in the horse, elephant and tapir, in which the stomach is comparatively small and the digestion imperfect.

In man with his perfect masticatory apparatus and proportionately large stomach, the cecum is unimportant from a digestive standpoint, and much of it has been reduced to a vermicular form, having no functions, and being functionless necessarily possesses a low degree of vitality under which it falls an easy victim in the cellular struggle for existence. In other words, evolution in cutting out the alimentary canal for man from the inside of the lower animals left a scrap or two basted on to the pattern and did not notice it until she had sewed the whole business up and pasted down the peritoneum.

And so the modern surgeon has to trim off the useless pieces left by her careless work

MEDICAL LAWS.

Ohio comes to the front with a new law to regulate the practice of medicine and surgery within her borders. The amended law was passed April 14th, 1900, and was to take effect within 30 days.

The Board of Examiners consists of seven members and are to be physicians in good standing. They receive ten dollars per day and their expenses.

They are to meet quarterly in Columbus.

An appeal may be taken from the action of the Board in refusing to grant, or revoking, license to practice. The fee for examination is \$25.00, which is not returnable, but in case of failure, the applicant may try again without extra cost.

The section defining a practitioner of medicine or surgery is important and is as follows:

'Sec. 4403f. Any person shall be regarded as practicing medicine or surgery or midwifery within the meaning of this act, who shall use the words or letters, "Dr." "Doctor," "Professor," "MD." "MB." or any other title, in connection with his name, which in any way represents him as engaged in the practice of medicine or surgery or midwifery, in any of its branches, or who shall prescribe, or who shall recommend for a fee for like use any drug or medicine, appliance, application, operation or treatment, of whatever nature, for the cure or relief of any wound, fracture or bodily injury, infirmity or disease. The use of any of the above-mentioned words or letters, or titles in such connection, and under such circumstances as to induce the belief that the person who uses them is engaged in the practice of medicine or surgery or midwifery in any of its branches, shall be deemed and accepted as *prima facie* proof of an intent on the part of such person to represent himself as engaged in the practice of medicine or surgery or midwifery, provided, however, that nothing in this act shall be construed to prohibit service in the case of emergency, or the domestic administration of family remedies; and this act shall not apply to any commissioned medical officer of the United States army, navy or marine hospital service, in the discharge of his professional duties, nor to any legally qualified dentist when engaged exclusively in the practice of dentistry, nor to any physician or surgeon from another State or Territory who is a legal practitioner of medicine or surgery in the State or Territory in which he resides, when in actual consultation with a legal practitioner of this State, nor to any physician or surgeon residing on the border of a neighboring State, and duly authorized under the laws thereof to practice medicine or surgery therein, whose practice extends into the limits of this State; providing that such practitioner shall not open an office or appoint a place to meet patients or receive calls within the limits of this State. Nor to any osteopath who holds a diploma from a legally chartered and regularly conducted school of osteopathy in good standing as such, wherein the course of instruction requires at least four terms of (5)

five months each in four separate years. Providing that the said osteopath shall pass an examination satisfactory to the State Board of Medical Registration and Examination in the following subjects: Anatomy, physiology, chemistry, physical diagnosis. Providing that said osteopath shall not be granted the privilege of administering drugs nor of performing major or operative surgery."

This law will have some effect upon the various diploma mills of the West and our osteopathic friends will have to read up on the bones and joints for awhile longer before they can secure the privilege of rubbing a patient's back the wrong way.

HYSTERECTOMY FOR MYOMA.

The American Surgeon has kept his work well in line with the progress made by workers in other fields. The manufacturer and the inventor have found the Surgeon at their side all along the journey toward perfection of labor. In the *Annals of Gynecology and Pediatrics* a review of America's contribution to the surgical diseases of the uterus is stimulating. Ovariectomy for tumors by McDowell in 1809 marked the dawning of the day.

The first successful hysterectomy, by Barnham, in 1853.

First application of galvanism to uterine myomata, by Cutter, in 1874.

Followed by the original work of Marcy, Price, Stinson, Polk, Kelly, Byford, Baer, Baldy, King, Eastman and others.

The changes in methods of performing hysterectomy for myoma may be briefly summarized as:

1st. Entire abandonment of the extra abdominal treatment of the stump, by *serre-noeud* or rubber ligature.

2nd. The wide trial and substantial rejection of vaginal hysterectomy, as an operation of election in cases of myoma and salpingitis.

3rd. The establishment of indications for the retention of the cervix uteri, as compared with total extirpation of the uterus.

4th. The adoption of a method substantially the same by most operators,

5th. The disuse of drainage, wherever possible.

6th. The common employment of the operation by general practitioners, operating in the small hospitals which are springing up in all towns in the country of 3,000 or more inhabitants. Each of these hospitals has from 4 to 12 visiting physicians and surgeons, among whom there are sure to be several desirous of performing surgical operations, and ready to attempt

the most difficult ones, with a zeal often in inverse ratio to experience and training.

In general, it is better to leave the cervix; because it makes the operation shorter and easier and gives less chance of hæmorrhage during the operation, and does not open so much cellular tissue for oozing and decomposition of blood after operation.

Because there is somewhat less chance of infection of the wound where only the small cervical canal is cut across, and instantly closed by the double tenacula, than when the whole vault of the vagina is opened.

Because the vaginal portion of the cervix is a seat of sexual feeling, and worth preserving, on that account, and the women do not feel so much mutilated if the cervix is present as when it is gone.

Because the lower parts of the broad ligaments with the cervix form a better support to the pelvic contents than does a simple union of the vault of the vagina.

Total hysterectomy should be performed: When the cervix is enlarged and diseased.

When the cervical canal is suppurating or septic.

When there is any suspicion of malignant disease.

When vaginal drainage appears desirable.

HOMEOPATHIC PHILOSOPHY.

Our homeopathic brethren are all good fellows and are very human like the rest of us.

They honestly believe that the hair of the dog is good for the bite unless the bite is very bad, when perhaps the knife or actual cautery is best. A distinguished homeopathic surgeon was asked what he would give to thoroughly clean out the bowels during the night if he was compelled to operate the following day. He replied: "Six grains of calomel and an ounce of salts."

Before the Missouri Institute of Homeopathy a paper was read by Dr. W. B. Morgan in which he reports a case of biliousness treated by homeopathic remedies which got no better until the patient went to a regular physician who gave him 10 grains of calomel and he was soon all right.

He reports several other cases as follows:

In the first year of my experience I encountered a bad case of inflammatory rheumatism in a very nervous young woman, who had taken a long ride in a cold rain-storm. Under the clearly indicated remedy the patient rapidly got worse till the family concluded to get another doctor. The experience was soon repeated with another

case and I was in despair about acute rheumatism till I began to perceive that rational treatment required the removal of the toxic substances causing the inflammation. After I began to act on the presumption that it was just as reasonable to chemically and mechanically evacuate disseminated toxic substances as it was to open and cleanse an abscess, I began to get rheumatic cases from other doctors and almost never had any desert me. My respect for the homeopathic remedy in any case has not decreased, but I have found out that it will not clean out an Augean stable so quickly as can sometimes be done with other means.

"In the last year of my practice I had a man with lumbago who continued to get worse under my treatment till at the end of two weeks his suffering was so great that the apprehension of himself and family that he was near death seemed not unreasonable. Upon the administration of morphine his ashen color and other symptoms of collapse quickly left him and he was well in a few days.

I might relate a long list of similar experiences, but these suffice to show there are diseased conditions which cannot be satisfactorily managed with remedies that are as near to being similars as it is possible for men to select, notwithstanding the very positive assertions of a few enthusiasts to the contrary. The law of similars is not of universal application, and men who attempt to make it out so not only fail to do their duty by many patients but reflect discredit upon the real truth. It is not to be expected that any fixed limits for the application of the law can be agreed on, but I think it due to the doctors of our school to make it as public as possible that they dwell in no "pent up Utica," that they are hampered by no exclusive dogmatism and do not stultify themselves when they employ non-homeopathic modes of treatment.

In repeating these statements I do not wish to belittle the homeopathic law. To see its limitations increases the certainty of its existence, and I believe I am defending it by aiding to clear it of popular misconception brought about by too extravagant claims of enthusiasts and fostered by prejudiced opponents. To be a consistent member of the Baptist church a man is not expected to stay under water all the time, and a homeopathic doctor should no more be expected to use nothing but little pills. The highest aim of the homeopathic physician and every other kind should be to learn and teach correct living, and to the degree that this is accomplished drugging according to any law will sink into the background.

To sum up, as I view the field, the homeopathic philosophy of to-day is not a theoretical ideal, but the practical outcome of one as represented by its exponents."

We have an idea that the discussion was very lively after the doctor sat down, but his remarks strike us as being full of reason and common sense. Even the regular doctor at times has to use the faith cure or mental therapeutics but he is never ashamed to acknowledge it for he is acting in the best interest of his patient and not blindly following some Latin motto.

FRACTURE OF THE FEMUR.

Fracture of the femur may be a grave injury, not so much on account of the fracture itself but because of the serious character of the injury causing it. Shock and exhaustion may be the immediate cause of death in the fatal cases. The principles of treatment are simple, rest, fixation, moderate extension and due attention to the condition of the limb and general health of the patient.

In the *Therapeutic Gazette* for May several authorities express themselves on the treatment of the condition.

Thomas G. Morton gives the methods in use at the Pennsylvania Hospital based on the treatment of 1459 cases, 1403 leaving the hospital cured. He calls attention to the fact that the lower limbs, of persons who have had no fracture, are rarely the same length which is interesting as regards its bearing on suits for malpractice.

The diet is important in these fractures, and the patient must be liberally fed to secure prompt union.

Oscar H. Allis says that deformity following fracture of the upper third of the shaft may be caused by extension which only influences the lower fragment.

The upper third of the femur is covered very uniformly with a thickened periosteum and the tendinous origin and insertion of muscles, and when this covering is broken through by the fracture we are very likely to have some deformity if it is treated by extension. If after a week's trial of external appliances there is still tilting of the fragments, he advises treatment applied directly to the bone.

Henry R. Wharton discusses the treatment of fractures of the femur in children, and he does not like plasterparis dressing. In those under 18 months old he prefers binder's board moulded to the part, and for older children he uses extension, counter-extension and lateral supports, as children of this age bear confinement in bed fairly well.

G. G. Davis lays down some rules in regard to the operative treatment. He prefers strong silver wire to pegs or plates. A long incision must be made to secure the proper amount of room, and it is not advisable to cut the fascia or muscles laterally.

Edward Martin concludes with the ultimate results of fractures of the femur. He gives a careful study of 100 cases, 45 in children and 55 in adults. He offers the following propositions:

In children fracture of the shaft of the femur involves mainly the middle third (thirty out of forty-five); next in order of frequency comes fracture of the upper third (ten out of forty-five).

The average period of treatment in bed and with crutches, splints, and bandages is five months.

In about one-third of these cases there will be no shortening, in about one-half a shortening of one centimeter, and in the remainder the shortening will be between one and two centimeters.

In the absence of shortening there may be a lasting weakness of the leg and thigh. Permanent disability is, however, as a rule associated with shortening, and is to an extent proportionate to the degree of shortening.

In adults fracture of the shaft of the femur involves mainly the middle third (thirty-two of fifty-five cases); next in order of frequency the upper third (seventeen of fifty-five cases).

The average period of treatment in bed and with crutches, splints, and bandages is eight months.

In four per cent. of cases there may be no shortening, in five per cent. a shortening of one centimeter, in nine per cent. a shortening of one and a half centimeters, in twenty-six per cent. a shortening of two centimeters, in nineteen per cent. a shortening of two and a half centimeters, in seventeen per cent. a shortening of three centimeters, in twelve per cent. a shortening of from three to four centimeters, and in the remaining ten per cent. an even greater shortening. (These percentages are approximate.) If the cases of fractures below the age of twenty be excepted, but eight per cent. of the total number exhibited a shortening of less than two centimeters.

An ultimate shortening of less than two centimeters after fracture of the shaft of the femur in an adult is the exception, and in men past twenty-one will not occur in more than one case out of ten.

An ultimate shortening of two and a half, three, or even four centimeters is so commonly observed after skilful treatment of simple fracture of the shaft of the thigh that

this circumstance is in itself not even suggestive of carelessness or improper treatment on the part of the surgeon.

Not more than one man in five who has sustained a simple fracture of the thigh will ever again be able-bodied. The other four will suffer from weakness and swelling of the leg and harassing pain, and if laboring men will be debarred from their usual work. The disability is often proportionate to the deformity, but not necessarily so.

The permanent disability following simple fracture of the femur is proportionate to the age of the patient, men of above forty regaining full strength and activity as the rare exception. In nearly all laboring men past middle age, and in the majority beyond twenty-one, a simple fracture of the femur implies a longer confinement to bed, a more painful and tedious convalescence, and a greater degree of permanent crippling and more recurring pain than does, for instance, an amputation below the knee.

The great difference between deformity measured and recorded when patients leave the hospital two or three months after they have been injured, and that measured several years after, seems to prove that there is nearly always a consecutive shortening due to the weight of the body acting upon the soft union of an oblique fracture, or one united in a faulty position.

The unsatisfactory results following the weight extension treatment of fracture of the thigh suggest that this method is either inadequate in itself or is unskillfully applied, or that the ambulatory treatment of fractured femur after consolidation of the bone is not sufficiently guarded.

The obvious lines along which efforts toward the obtaining of better results should be directed are: (a) The employment of more weight in procuring extension—fifteen to thirty pounds—an effort being made entirely to overcome the deformity. The resin straps by means of which the extension is applied should be carried from the ankle to the middle third of the thigh. (b) If extension does not reduce deformity, cutting down upon the fracture and plating or wiring it. (c) The systematic use of massage and passive motion continued for months. (d) A much longer use of crutches than is now customary, supplemented by a high shoe on the sound foot, and short molded splints about the seat of fracture; the whole leg of the injured side being kept snugly bandaged while it is held in a dependent position.

A sanitary bible, bound in celluloid, which can be washed, has been introduced into court rooms.

BOOK REVIEWS.

Progressive Medicine—Volume II, 1900. A Quarterly Digest of Advances, Discoveries and improvements in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, M.D., Professor of Therapeutics and Materia Medica in Jefferson Medical College of Philadelphia: Octavo, handsomely bound in cloth, 401 pages, with 81 engravings. Lea Brothers & Co., Philadelphia and New York. Issued quarterly. Price, \$10.00 per year.

An examination of this, the second volume of the 1900 series of Progressive Medicine, reveals the very practical lines which have been followed by its contributors.

Dr. Coley, in his article on "Surgery of the Abdomen, Including Hernia," treats of one of the newest and most interesting phases of modern surgical practice, namely: operations upon the stomach. With admirable details this able authority describes the diagnostic symptoms, the methods of operating, treatment and the management of convalescence.

The ever important subject of appendicitis is next considered from a practical standpoint, the merits of a newer method of operating being carefully investigated. Bassini's operation in Hernia is described in practical detail, and operations upon the intestines, colon and liver are exhaustively considered in the aspects of operation and results. Abdominal tumors and the methods for their diagnosis, come next, and this is followed by a most interesting consideration of the X-ray in detecting abdominal calculi. The illustrations given in this section, as in fact is the case throughout the volume, are most helpful.

Dr. John G. Clark gives an admirable resume of the progress made in Gynecology during the past year. The various topics discussed are too numerous for special mention, but the sections on "The Treatment of Pelvic Peritonitis," "The Treatment of Inflammatory Pelvic Exudates," "Ultimate Results of Treatment of Retroversions," etc., are especially interesting.

Dr. Stengel covers a list of diseases, from which arise a large proportion of human ills, following the preliminary pages in which the diagnostic value of the varying conditions of the blood is dealt with. Such pathological conditions as anemia, chlorosis, leukemia, etc., are practically considered. The diseases due to metabolism logically follow, and as the subject-matter is treated in great detail, Dr. Stengel's section must prove of great practical value to the physician.

In treating of his specialty, Dr. Jackson

has aimed to supply the requirements of the general practitioner rather than those of the specialist in Ophthalmology. He has endeavored to so equip the practitioner with the most recent knowledge in this branch of medicine as to enable him to successfully treat the majority of cases which may come before him. In fact, this entire volume is full of practical information to an extent which has rarely been equalled in a single book. The aim of the editors and contributors to produce in narrative form the record of the year's events, has been ably carried out. Each succeeding volume of this series emphasizes the degree to which this original and ingenious plan has been perfected, and the necessity for increasing the large editions with each succeeding volume attests the growing popularity of the work.

A Text-Book of Practical Therapeutics: With especial Reference to the Application of Remedial measures to Disease and their Employment upon a Rational Basis. By Hobart Amory Hare, M. D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. With special chapters by Drs. G. E. deSchweinitz, Edward Martin and Barton C. Hirst. New (8th) edition. In one octavo volume of 796 pages, with 37 engravings and 3 colored plates. Cloth, \$4.00; leather, \$5.00, net. Lea Brothers & Co., Philadelphia and New York.

Practitioners as well as students will be interested to hear that still another edition of Hare's Practical Therapeutics is at their service. Eight large editions have been demanded in a little over nine years and as the author has utilized each opportunity to the full, his book has become synonymous with up-to-date knowledge of remedies and how to apply them. The scheme of the book is ingenious and convenient. Its first half gives all necessary knowledge of drugs, non-medicinal remedies, foods, etc., and the second half is virtually a pithy Practice of Medicine, the best treatment of the various diseases being given with full directions. Everything in the book is arranged alphabetically for obvious convenience and abundantly cross-referenced so that the reader has no trouble in finding full information on any given subject. Besides the tables of doses, weights and measures, the book contains a General index and a Special Index of Diseases and Remedies. The latter being arranged alphabetically by Diseases and annotated, gives suggestions and indications for the best treatment together with page references to the full information in the text. A more convenient aid could scarcely be imagined. The new edition contains the

large number of important new remedies which have stood the test of clinical experience and many added facts of therapeutic value. New illustrations and colored plates have been introduced. Those who are still unacquainted with this book should by all means procure it, and those who have previous editions and know their value will secure this new one to post themselves to date on the most important of all departments of medicine—treatment.

Manuel Complet De Gynecologie Medicale et Chirurgicale. Par A. Lutand, Professeur libre de Gynecologie, Medecin adjoint de Saint-Lazare, Membre fondateur de la Societe Abstericale et Gynecologique de Paris; Membre de la Societe gynecologique de Landres; de la Societe de Medicine legale de France, etc. Nouvelle edition Entierement Refondue Contenant la Technique operateiro complete et 607 figures dans le texte. Paris: A. Maloine, Editeur, 28-25, Rue de L'Ecole-de-Medicine. 1900.

This work on Gynecology will compare favorably with any English work on the subject.

This is the fourth edition and is thoroughly revised and up to date. The illustrations are particularly valuable and serve to make the text plain and easily understood. The language is clear and the descriptions, especially if operative procedures are concise and to the point.

Plastic operations about the perineum, vagina are described in detail with an abundance of well executed cuts.

The portion of the work relating to uterine displacements reflect credit upon the genius of the author and its practical nature will appeal to all who read it.

The volume is divided into eight parts which follow each other in logical order, thus making the most difficult part of the subject seem perfectly simple by its connection with what has gone before.

A very complete index of both figures and texts round out the work. A very convenient arrangement of the index gives the names, in small capitals, of all the authors referred to in the body of the book. This treatise should be in the library of every gynecologist in the country.

The Treatment of Fractures. By Charles Locke Scudder, M.D., Surgeon to the Mass. General Hospital, etc., Assisted by Frederic J. Cotton, M.D., with 585 illustrations. Philadelphia: W. B. Saunders, 925 Walnut St. 1900.

It is a self-evident fact that the treatment of fractures is done much more intelligently to-day, with much more successful results

than in past years. This is due to three important factors: the employment of Anæsthesia; the application of the Rentgen, and Antisepsis has opened to operative surgery a very profitable field in the treatment of fractures. The attention of the student is directed from theories and apparatus to the actual conditions that exist in the fractured bone, and he is encouraged to determine for himself how to meet the conditions found in each individual case of fracture. This is a very plain and a most practical work and will serve as a safe guide to the practitioner and student in the treatment of fractures of bone. The author prefers to use the terms "closed" and "open" fracture in place of "simple" and "compound"—these terms are better, the old terms are misleading, despite their long usage. "Closed" and "open" express definite conditions, referring to the freedom from, or liability to, bacterial infection. In this work theories of treatment are not discussed. Types of dressings for special fractures are clearly described.

Annual and Analytical Cyclopedia of Practical Medicine. Charles E. de M. Sajous, M.D., and one hundred associate editors, assisted by corresponding editors, collaborators, and correspondents. Illustrated with chromo-lithographs, engravings, and maps. Volume V. 662 pp. Philadelphia, New York, and Chicago. 1900. The P. A. Davis Company, Publishers.

This, the fifth volume of the Annual, includes subjects from Methy-Blue to Rabies, and is uniform in style and subject-matter with the former volumes.

A greater amount of work has been put upon this volume than any previous issue, and it embraces almost every specialty—otology, laryngology, ophthalmology, neurology, pediatrics, obstetrics, therapeutics, etc.—besides the sections usually classed under general medicine and surgery.

A timely paper of great value on "Nursing and Artificial Feeding," by Holt and Fetra, will be found in this issue. Nearly every doctor has a number of infants under his charge during the summer months and the mortality can be materially reduced in such cases if the teachings of this paper are carefully studied and carried out.

Two strictly up-to-date articles are "Disorders of Pregnancy," by Currier, and "Abnormal Parturition," by Grandin and Monx. Instead of repeating text with which a physician's shelves are usually fully supplied, text-book matter, these articles aim to give, and do give, the newer aspects of these questions as well as the tendency of progress thought.

Among the other articles of special worth are, "Pleurisy," by McPhedran, "Catarrhal Pneumonia," by Solis-Cohen, and "Lobar Pneumonia," by Ashton.

A Practical Treatise on the Sexual Disorders of the Male and Female. New (2d) edition. By Robert W. Taylor, M.D., Clinical Professor of Venereal Diseases in the College of Physicians and Surgeons, New York. In one handsome octavo volume of 435 pages, with 91 illustrations and 13 plates in colors and monochrome. Cloth, \$3.00 net. Lea Brothers & Co., Philadelphia and New York.

Judged from a practical, scientific, comprehensive and trustworthy standpoint, Dr. Taylor's work stands second to none on the subject of Sexual Disorders of the Male and Female. The medical profession will eagerly welcome the views and opinions of Dr. Taylor in this second edition than whom perhaps no other man has had so large an experience with these disorders. The demand for the book was so great that the first edition was exhausted far earlier than could have been anticipated and many orders remained unfilled. In this edition the author has gone over the entire text, revised it, amplified it, added to, and modified it, thus making it one of the most thorough and reliable works upon these subjects that has been written. The subject of sexual disorders in women has been more thoroughly treated and new chapters appear on vaginismus masterbation in women, and kraurosis vulvæ. The chapters on the anatomy and physiology of the sexual apparatus and on psychical importance and masterbation in male subjects have been rewritten and very much enlarged. A great deal of attention has been paid to the matter of therapeutics in the direction of clearness of statement and of practicality. The work contains many new illustrations in colors and monochrome. The volume from a mechanical view is a credit to its publisher.

A Text-Book of Medical Treatment of Diseases and Symptoms for the use of Students and Practitioners of Medicine. By Nestor Tirard, M.D., F.R.C.P., Professor of Principles and Practice of Medicine, King's College, London. Adapted to the U. S. Pharmacopœia by E. Quin Thornton, M.D., of Jefferson Medical College, Philadelphia. In one octavo of 620 pages. Just Ready. Cloth, \$4.00. net. Lea Brothers & Co., Philadelphia and New York.

This book certainly comes into popular favor with students and practitioners, because it is a work we have long needed, and because it is the most practical of

books. It is a sad fact, nevertheless true, and hardly explainable, that *treatment*, the most important subject in all medicine, has been largely neglected in books on practice, in fact, cramed out by less vital matters. It seems for the past ten years all the physician has been trying to do was to find out what was the matter with his patient, regardless of the best methods of treatment. This work deals alone with the most modern and approved treatment of every disease, including its pressing symptoms, complications, stages and prophylaxis utilizing all the best and most advanced agencies, both medicinal and non-medicinal. It deals comprehensively with therapeutical medications and presents a great number of well-selected formulas of every day use. The author very tersely states that it answers the needs of the student by bridging the gap between his plentiful knowledge of theory and his scanty acquaintance with actual disease. This volume is from the pen of a master, and is destined to become popular. It is well printed and bound and it affords us much pleasure to commend it in the highest terms to our readers.

Saunders' Question Compound No. 17—Essentials of Diagnosis—Arranged in the Form of Questions and Answers for Students of Medicine. By Solomon Solis Cohen, M.D., and Augustus A. Eshner, M.D., of Philadelphia. Second Edition. Revised, enlarged and illustrated. W. B. Saunders, 925 Walnut St., Philadelphia. Pa. Price, \$1.00, cloth.

With each edition of these compends we notice improvements. This edition has been thoroughly revised and considerably enlarged. Much new material has been added, and recent additions to knowledge incorporated. While this work makes no pretention to be encyclopedic, yet it may be referred to with benefit by physicians as well as by students. The essentials of the subject have been very clearly set forth. The work being written more especially for students, ambiguity is avoided and everything sacrificed to accuracy and brevity.

Fractures, by Carl Beck, M.D., Visiting Surgeon to St. Mark's Hospital and the New York German Poliklinik; formerly Professor of Surgery New York School of Clinical Medicine; Consulting Surgeon Sheltering Guardian Society Orphan Asylum, etc., with an appendix on the practical use of the Rontgen Rays. Cloth, 178 illustrations, 336 pages. Philadelphia: W. B. Saunders & Co. 1900. \$3.50, net.

This work on Fractures is written in the light of the Rontgen Ray

which has led to so many and revolutionary discoveries in the past two years.

The illustrations with which the book is filled have a living interest and clearly shows the actual condition and not a complicated theory.

The typographical and pictorial excellence of the book are most pleasing and the interested surgeon will read it from cover to cover without effort.

The appendix of 50 pages on the practical use of the Rontgen Rays gives all that a busy man needs to know on this subject.

The tracings of the Rontgen ray has been given very careful study, illustrating the sites and the displacements of fractures. Every form of fracture has been clearly described in this work with the appropriate treatment. We know of no work so complete on this one subject as this one. The illustrations are very fine and numerous. We highly recommend the work to our readers. It is well bound and printed in clear type on clean white paper.

Essentials of Materia Medica, Therapeutics and Prescription Writing. Arranged in the form of Questions and Answers. Prepared especially for Students of Medicine. By Henry Morris, M.D. Fifth edition, revised and enlarged. Philadelphia: W. B. Saunders, 925 Walnut St.

In this the fifth edition of this compend, the author has brought it as near as possible thoroughly abreast of the times. Much that was obsolete has been omitted and many new drugs, especially among the group of antipyretics and hypnotics, have been added, while the older subject matter has been carefully revised and corrected. The dosage of each preparation has been expressed in the metrical weights and measures as well as in the apothecaries' weight and wine measure. The little volume will be of great aid to the student in his study.

Transactions of the Michigan State Medical Society for the Year 1899, Vol. xxiii. Grand Rapids. Published by Society, 1899.

These transactions come to us regularly and always show careful preparation which make them a credit to the Association they represent. The annual address was delivered by the President, Dr. Ernest L. Shurly, and his subject was Ethics and Commercialism. The subject was well handled. Many excellent papers were read and fully discussed. Under these discussions many valuable suggestions were brought to the physicians' attention. The volume is well bound and neatly printed.

Indigestion: Its Causes and Cure. By John H. Clarke, M.D. American Edition. Philadelphia: Boerecke and Tafel. 1900.

In this little work the author describes the normal process of digestion and sketches the various derivations from the normal process to which the process is liable, and shows how they may be avoided, and how cured.

The writer devotes a chapter to the diet treatment of indigestion, and gives a list of medicines most useful in the disease, with the particular indications for their use.

Transactions of the Royal Academy of Medicine in Ireland. Vol. xvii. Edited by John B. Story, M.B., F.R.C.S. General Secretary, Dublin, Fannin & Co., Ltd., 41 Grafton St. 1900.

These transactions form a large volume of nearly 700 pages, and are filled with matter of great interest and importance. We prize them highly for the high order of material found in them. They contain paper after paper read and discussed by the leading men of the Association. The illustrations in some of the papers are very fine and expressive. One of the best articles found in this volume is that by Dr. T. W. Grimshaw, C.B.M.A., M.D., upon "The Presence of Tuberculosis in Ireland, and the Measures Necessary for its Control."

The volume is well bound and clearly printed.

Transactions of the New York State Medical Association for the year 1899, Vol. xvi. Edited for the Association by M.C.O'Brien, M.D., of New York county. Published by the Association.

This volume contains the usual number of excellent papers by the most prominent physicians of New York State. These transactions are thoroughly up-to-date in every respect. They contain more good papers than any other volume of transactions. The papers are lengthy, discussed in a very able manner; the papers are instructive, and the volume, as a whole, is a very valuable one.

Transactions of the Twenty-First Annual Meeting of the American Laryngological Association held in the City of Chicago, Ill., May 22, 23, and 24, 1899. New York: D. Appleton & Co. 1900.

This Association deserves great credit for the handsome manner in which these transactions are gotten out. The articles are timely, hightoned and very interesting and instructive. Dr. William E. Casseberry of

Chicago, is President, and Henry S. Swain, M.D., of New Haven, is Sec. & Treasurer. The volume is very prettily printed on nice paper and neatly bound.

LITERARY NOTES.

THE "NEW LIPPINCOTT" MAGAZINE FOR JULY, 1900.—The July "New Lippincott" is primarily a summer story number. The complete novel, called "An Anti-Climax," is a story of modern society in a swell suburb by Ellen Olney Kirk. Many remember "The Story of Margaret Kent," by the same pen, which achieved so great a success several years ago, and in this later work Mrs. Kirk bids fair to excel her earlier one. Stanwood Fleming, an interesting, absent-minded widower, is plunged into despair at the prospect of "bringing out" his twin daughters. In accomplishing this he is ably assisted by an attractive widow and a clever, good-looking spinster cousin who rival each other in devising plans of campaign. The introduction of a lady typewriter rather upsets these plans. The anxiety of the girls for their farther's future, and his concern about them and their lovers, are diverting episodes, and the amusing end of in all must be left for the reader to discover.

The first of five extraordinarily good short stories is notably Marion Harland's college tale "As a Dream when one Awaketh." This special graduation happens to be at Rutgers, but the incident might occur any day at any college, so it appeals to us all and is intensely interesting.

"A Monk from the Ghetto," by a new writer of much originality, Martha Wolfenstein, may be considered an antithesis to Maarten Maarten's story "The Little Christian," which appeared in "Lippincott's" several months ago and stirred up quite a controversy. The lifelong friendship between a Catholic priest and a Jew is the key-note of the plot.

"Damnabilissimus Juvenis," by Beulah Marie Dix, is a thrilling tale of Roundhead times, with a hero who found that knowledge of Latin saved his neck in time of danger.

"How Willett Wooed the Widow," by Samuel Minturn Peck, is a laughable story on the subject indicated by the title, and will serve as a warning—or an example—to those who are going to do likewise.

"The Giant's Golf," is a clever skit by Henry Wallace Phillips. This is a quite new treatment of a familiar subject.

Two important papers give timely in-

terest to the number: An uncommonly brilliant one is on the famous American beauty, Emilie Schaumburg, by Virginia Tatnall Peacock. Miss Schaumburg (now Mrs. Hughes-Hallet, of London) was a Philadelphian by birth, and was not only wonderfully beautiful but exceptionally talented in every way, though she acknowledged herself to be "a dismal failure at both sewing and arithmetic." This full, yet brief, account of her career is extremely entertaining. A handsome portrait of Miss Schaumburg appears as a frontispiece. The paper forms a chapter of a forthcoming volume on "Belles of America."

The significant Series of "Great Battles of the World," by Stephen Crane, is continued in a splendid description of Wellington's gallant fight at Vittoria; which bears with intense meaning on the English campaign in South Africa. The recent death of the brilliant young author is deeply felt throughout America and Europe and makes especially interesting this Series of papers, which was finished shortly before Mr. Crane's pen was laid aside forever.

The verse of the month consists of "A Twilight Moth," by Madison Cawein; "Age and Youth," by Clinton Scollard; "Tension," by Florence Wilkinson; "Dandelions," by Philip Gerry; and "Rain-drops," by Margaret Crowell. All reasonable and rarely good.

"Walnuts and Wine," the department at the end of the Magazine, which appeals to everybody, overflows with material witty and wise.

The American Monthly Review of Reviews for June is a well-illustrated number. The important news topics of the month are editorially treated in "The Progress of the World," the opening department. A character sketch of James J. Hill, a Builder of the Northwest, is contributed by Mrs. Mary Harriman Severance, who outlines the remarkable career of the president of the Great Northern Railroad. Dr. Albert Shaw, the editor, writes from full knowledge on "Paris and the Exposition of 1900." Mr. Jacob A. Riis, author of "How the Other Half Lives," forecasts the work of the New York Tenement-House Commission recently appointed by Governor Roosevelt. Mr. Cleveland Moffett writes on "Automobiles for the Average Man." Mr. Charles A. Conant describes the operation of the refunding law passed by Congress last March. There are also illustrated articles on summer camps for the boys, the Passion Play at Oberammergau, and new fiction for summer reading.

Richard Harding Davis's "The Relief of Ladysmith" in the July Scribner's is probably the most brilliant piece of war correspondence since his famous story of the fight at LasGuasimas. He gives a vivid impression of the ways of living, the privations, suffering, and the constant danger in the besieged city, and of the fine spirit of endurance that enabled its defenders to hold out until the last. He shows, too, how difficult it was for the advancing column under General Buller to make its way through the surrounding hills that afforded the Boers an almost impregnable natural defence and describes the stirring scenes attending the entrance into the city of the relief column. The illustrations are from photographs in the city and of the country about.

Among the thirteen articles in the June Forum, there are at least seven which will be widely quoted and discussed; Consul-General Ho Yow's vigorous criticism of "The Attitude of the United States Towards the Chinese;" "Do We Owe Independence to the Filipinos?" by the Hon. Charles Denby; Sir Charles W. Dilke's paper on "U. K., U. S., and the Ship Canal;" "The Present Position of the Irish Question," by the man best qualified to speak, J. E. Redmond, M.P.; Edward Emory Hill's essay on "Teaching in High Schools as a Life Occupation for Man;" Professor Hall's arraignment of "College Philosophy;" and the Hon. John Charlton's paper on "American and Canadian Trade Relations."

ABSTRACTS of the One Hundred Leading Articles of the Month.

Alcohol in Typhoid Fever.

The value of alcoholic stimulants, particularly in typhoid fever, is being more and more questioned.

J. H. Musser, in the Therapeutic Gazette for April 15th, says that the best indication for the use of stimulants in this disease is to prevent their use. That is, to prevent by proper treatment the patient falling into that state of the system which requires stimulation.

He claims that much less alcohol is used since the introduction of the "Brand method." Three conditions call for stimulation: Toxemia, exhaustion, the accidents—perforation and hemorrhage.

When these come in despite our treatment then stimulants are necessary.

Toxemia with excitement calls for opium

in small or stimulating doses, as 5 to 10 drops of the deodorized tincture.

Toxemia with depression calls for the cautious administration of alcohol and in some cases other stimulants are best.

The best guide is the renal secretion, if it increases by stimulation all is well.

In typhoid septicemia we may be more liberal in the use of alcohol.

During convalescence, if necessary, light wines or malt liquors may be given for the exhaustion and to aid the digestion.

For perforation or hemorrhage the stimulation should be gentle and persistent, combining opium with the whiskey or brandy.

Atrophic Rhinitis.

In discussing the etiology of chronic atrophic rhinitis, F. H. Bosworth, in the *Laryngoscope* for May, says that it is developed from the purulent rhinitis of childhood and that it does not follow hypertrophy of the mucous membrane.

In early life it is the epithelial structures which are especially involved in a tendency to catarrhal inflammation, the secretion is increased together with an exaggerated proliferation of the epithelial cells.

The discharged mucus contains young and unripe epithelial cells and this process gradually extending into the follicular structures and into the racemose glands, they become denuded of their epithelial cells, collapse and disappear. So the secreting surface of the mucous membrane is, to a certain extent, destroyed. The secretion becomes inspissated, dries into crusts and interferes with the flow of blood in the mucous membrane, which contracts and thus interferes with the respiratory function of the nose. Later the turbinated bodies and the turbinated bones are involved.

Acute Pneumonic Tuberculosis.

According to the *International Medical Magazine* for June, Elting, in the *Amer. Jour. of the Med. Sciences* for May, states that the clinical features of this disease are: (1) Onset very often without, but sometimes with, definite chill. (2) Fever regular in character but very frequently of an irregular or remittent type, and always remittent in the later stages. (3) Absence, usually, of marked dyspnea or cyanosis. (4) Physical signs of consolidation, involving part or whole of a lobe or several lobes. (5) Pain, cough, sputum at first typical and rusty, but which, at the end of a week, may become greenish, and in which tubercle bacilli can usually be found. (6) Absence of leucocytosis. Elting's case presented

the above symptoms very completely, and the autopsy showed a typical acute tubercular pneumonia with areas of focal necrosis in the liver, in which tubercle bacilli could not be found and which were supposed to be caused by their toxin. The acute pneumonic form of tuberculosis would appear to be not very uncommon, and in all protracted cases of lobar pneumonia the possibility of its occurrence should be considered. Of course an absolute diagnosis can be made only by the discovery of the tubercle bacillus.

Adenoids.

A case of persistent adenoids in a woman aged forty-seven, is reported by E. F. Potter in the *Journal of Laryngology* for June.

She presented herself at the hospital complaining of impaired hearing and difficulty of breathing through the nose, and showed the typical appearance of a chronic mouth-breather.

On careful examination a considerable mass was found, which obscured the upper half of the septum and extended across the vault from tube to tube.

The growth was removed and under the microscope was found to be adenoid tissue which had undergone inflammatory changes probably covering some length of time.

Adenoids at this age are very rare, though Luc has reported a case at fifty-four and Solis-Cohen one at seventy.

Analgesia of the Ulnar Nerve in Epileptics.

According to the *Medical Age* for June 25th, Lannois and Carrier, in the *British Medical Journal* for June 9th, states that in 130 epileptics, of whom fifty were males and eighty were females, sensation to pressure on the ulnar nerve at the elbow was, as regards males, normal on the two sides in twenty-seven out of fifty cases, normal on one side only in four cases, diminished or markedly obtuse on both sides in eleven cases, and diminished on one side in six cases. There was complete analgesia on both sides in five cases, and on one side in four cases. In other words, the male epileptics showed ulnar analgesia in fourteen per cent. of the cases, diminished sensibility in twenty-eight per cent. and normal sensibility in fifty-eight per cent. The eighty women gave the following results: Sensibility was normal on the two sides in forty cases, and diminished on the two sides in eleven cases. Eleven cases showed a diminution of sensibility on one side only. There was ulnar analgesia on both sides in fourteen cases, and on one

side in ten cases. The female epileptics thus showed ulnar analgesia in 24 per cent. of the cases, diminished sensibility in 20½ per cent. and normal sensibility in 55 per cent. The percentages in the two sexes were as follows: Ulnar analgesia, 20; diminished sensibility, 23½; and normal sensibility of the ulnar nerve, 56½. The authors conclude that ulnar analgesia may be regarded as a diagnostic sign of minor importance, but that it cannot be taken as a sign of value in differential diagnosis from hysteria, for example. Analgesia was present in a large number of cases after an epileptic fit, but any marked analgesia generally disappeared about twelve hours after the attack.

Adonidin.

Heinrich Stern, in Merck's Archives for May, makes out a good case for adonidin in certain disease conditions of the heart.

In rapidity certainty and permanency of action he considers it superior to digitalis and other heart remedies.

Its diuretic action is about the same as that of digitalis, in health, but in certain affections of the kidneys and in pyretic conditions it is more pronounced.

There is no record of any case where adonidin produced lethal effects in man.

Appendicitis in Women.

The peculiarities of this disease as seen in women are discussed by J. H. Davenport in the Providence Medical Journal for July.

His conclusions are that appendicitis is not so rare a disease in woman as has been generally supposed.

On account of the smaller size and better blood supply of the appendix in the female it is less liable to become so acutely inflamed as to call for operation, and too, on account of the many diseases in the female with which appendicitis may be confounded, its true diagnosis is often overlooked.

In every abdominal section, for whatever purpose whatsoever, it is absolutely essential for the best interest of our patients to examine into the condition of the appendix.

Appendicitis is frequently observed as a complication or extension of many of the pelvic disorders of women, where it had not been suspected prior to operation.

Appendicitis may be the cause of salpingitis or right-sided pelvic suppuration, but probably more frequently happens as a result or effect.

Chronic appendicitis is sometimes found to be the sole trouble in those women of a

neurotic temperament, when a previously false diagnosis of ovaritis or ovarian neuralgia has been made.

The differential diagnosis of appendicitis and the various diseases of women with which it may be confounded becomes comparatively easy if a complete history of the case is taken in connection with a carefully made physical examination.

Bacteriology and Medicine.

Bacteriology has relations with every department of clinical medicine, according to Richard C. Cabot in the Boston Medical and Surgical Journal for May 10th.

It has to do with etiology, diagnosis, symptomatology and the course of disease, prognosis and treatment.

By its aid we have found the causes of diphtheria, tuberculosis, bubonic plague, tetanus, anthrax, cholera, relapsing fever, influenza, gonorrhea, glanders, erysipelas, actinomycosis, and typhoid.

So the busy physician cannot afford to despise this new science, for when properly used it is of incalculable assistance in the successful treatment of disease.

The author calls attention, however, to a very important point, that failure is the result when we try to divorce the laboratory findings from the clinical aspects of the case, for in setting the one over against the other error is almost sure to creep in. They are inseparable and must be always used together, and for this reason he advises that the clinician should, if possible, be his own bacteriologist, or at least allow his assistant to make the examinations, as he will be familiar with the clinical history of the case. Otherwise the most conscientious bacteriologist may convey a wrong impression through a written report to the attending physician.

Bradycardia.

According to the Medical Record for June 23d, James J. Walsh reports a case in a woman, aged 31 years, whose pulse was normally about 36 and under excitement went up to 40. There was nothing in her family history that threw much light on the condition. Her mother and five brothers and sisters were living and well. As a child this patient suffered from most of the ordinary diseases of childhood, and there was a tradition in the family that if there was any disease about she would catch it. She played, ran, and skipped rope quite as other children did. Though seen a number of times by doctors they never called attention to the fact that her pulse was slower than normal. About ten years ago she had

the grippe, and while convalescing from that her physician called her attention to the fact that her pulse did not rise above 40. Since then she had been apparently in perfect health. For a while she was a dancer on the stage and in private drawing-rooms. She did not notice that she seemed more exhausted than others after severe exertion. Of late she had been suffering somewhat from digestive symptoms, and it was for these that she had come under treatment. Her gastric symptoms had practically disappeared under simple tonic treatment, and now she considered herself in good health once more. The question arose whether the bradycardia was congenital or acquired. It seemed to exist in no other members of the family, and the fact that physicians did not call attention to it when she was young seemed to indicate that her bradycardia was a sequela of influenza.

Circumcision.

We are accustomed to look on this as a very simple operation, but there are certain points to keep always in mind or the result may be some deformity of the penis.

L. W. Bacon, Jr., contributes a very practical paper on this subject to the Archives of Pediatrics for May. He advises that an abundance of cutaneous tissue be left in the neighborhood of the frenum, resect freely the mucous layer of the foreskin and see that no connective tissue intervenes between the skin and mucous membrane as the stitches are drawn tight.

As to method he makes a straight cut on the dorsal aspect as far as may be deemed necessary, and before going farther a stitch is taken in the angle of this cut. The prepuce is then cut circularly for a short distance and another stitch put, and so on cutting and stitching until both sides are finished, and lastly the frenum is attended to.

In this way it is easy to see just how much mucous membrane and how much skin is being taken, and the putting in of the stitches as we go keeps them in correct apposition.

About the hardest thing to dress in surgery is a circumcision wound, but his plan is very simple.

Pass a roller bandage around the waist for two or three turns and upon the middle of this hang a double strip of gauze, 12 to 16 inches long and five or six thicknesses of the material. In the posterior fold is cut a slit just large enough to receive the penis, while the anterior fold falls forward like an apron.

Cystoscopy in the Female.

This important method of diagnosing disease conditions of the bladder wall, or for other purposes, may be done according to the plan of Pawlik-Kelly or that of Nitze.

According to Gustav Kolischer, in the St. Louis Medical Gazette for May, the Nitze method is preferable.

Pawlik-Kelly's cystoscopy must be considered as a surgical interference of major dignity, while Nitze's cystoscopy is hardly more than ordinary catheterism.

A bladder filled with air breaks and reflects the rays of light, but if filled with water this is avoided.

Pedunculated tumors are pressed against the bladder walls by the pressure of air, while if the bladder is dilated with water they are kept afloat like water plants.

He mentions other advantages and concludes that Nitze's cystoscope is far superior to any other method of this kind, and that it is the only method which deserves the name modern, in so far as harmlessness and exactness are concerned.

Cause of Failure in Electrotherapeutics.

Edward P. Colby, in the Journal of Electro-Therapeutics for May, calls attention to one of the causes of failure in this form of treatment for disease conditions. This is the failure to differentiate between functional and degenerative conditions.

One may have a long series of functional cases and become over-confident when some central disease comes into his hands for electrical treatment. But even these central lesions may be improved by the judicious use of electricity continued for a length of time. In commencing such treatment we should be careful to tell our patient that it will take time, and at the outset he must make up his mind not to get restless or discouraged.

The author does not believe that all or even a majority of cases of central lesion can be materially relieved, but that occasionally a case occurs in which permanent arrest of the morbid process may be attained.

Displacements of the Uterus.

Louis Frank, in Obstetrics for June, says that the uterus is held in place by its specific gravity, which implies an intact perineum.

Displacement then may occur from increase in the comparative weight of the uterus or from changes in the closed cavity itself which reduces the pressure.

Relaxation of the ligaments is also mentioned and certain other causes which act directly as, violence, falls, strains, etc.

Anterior displacements are rarely pathological.

In the treatments of retrodisplacements there is no one method which can be applied to every case. The pessary, ventro-fixation, ventro-suspension and the Alexander operation are the means to be used.

The condition of the perineum he thinks of great importance and in certain cases the plastic operations of Emmet should be faithfully carried out.

Estivo-Autumnal Fever.

H. A. Veazie, in the New York Medical Journal for June 2d, discusses the fever which prevailed in New Orleans during the Summer and Autumn of 1899.

He gives some very good reasons why he calls it estivo-autumnal instead of yellow fever. The blood after careful examination showed the estivo-autumnal parasite, in many cases the corpuscles containing the parasites were shrunken, crenated and brassy. No true cultures of the bacillus icteroides was made and all the post mortems were not distinctive of yellow fever. Rapid recovery under quinine if given so the system can take it up.

Cases complicated with black vomit, suppression of urine, coma and convulsions were rapidly cured by the hypodermic use of quinine which would not have occurred if they had yellow fever.

The spread of the disease was not like that of yellow fever, as it began among the residents, while yellow fever is always imported. Only one or two in each family were taken sick at the same time.

He reports a number of Dr. Bel's cases showing the prompt action of quinine.

Out of 55 cases only one died, all treated with quinine.

Epilepsy.

According to the Columbus Medical Journal for June, each day an adult uses 15 grams of sodic chloride in his food, or nine grams of chlorine. A litre of milk contains 0.95 of a grain of chlorine.

Richel and Toulouse believe that by reducing the sodic chloride in the food that smaller doses of bromide would be effective in the treatment of epilepsy, because the sodic bromide would replace the sodic chloride in the tissues. And the diminished chlorides would allow an easier absorption of the bromides.

The treatment then in a nutshell is an

absolute milk diet, and from 15 to 45 grains of sodic bromide thrice daily.

The results of this style of treatment have so far been flattering, and it is said the small doses of bromides are more potent, in the conditions given, than massive doses under the old rules.

Dental Caries in Public School Children.

The prevention of disease is so much better than the cure and it is doubtless much easier to keep a child well than to cure a diseased old man.

Caries of the teeth in school children should be looked after according to Arthur DeVoe in Pediatrics for May 1st. The micrococcus fetidus preys upon the teeth of our children and in this day of asepsis we allow the mouth to become a source of infection without a word of protest. Children with ringworm or vermin-infected heads are sent home for treatment and purification, but the child whose mouth is a veritable bacteria farm is allowed to come and go as he pleases.

Much of this work should be done at home where the mother should cultivate the child's pride in spotless teeth.

But over all there is need of medical supervision of our public schools, and the supervision should include the supposed healthy as well as those evidently diseased.

Epithelial Cancer.

C. Truneczek, in the Medical Record for June 2d, writes in favor of the radical cure of epithelial cancer by the local application of arsenic.

He believes that arsenious acid gives a constant reaction with cancerous tissue and by watching for it we can tell when all the disease has been destroyed.

He uses 15 grains of pulverized arsenious acid in 5 ounces and a dram of equal parts of ethylic alcohol and distilled water. This is applied with a brush to the whole surface of the cancer and left to dry, and this is repeated daily, unless there is much edema, until the crust invades the whole substance of the neoplasm and the eschar is freely movable.

As the scab falls away, another application is made to the bottom of the ulcer, but only one unless the crust is dark instead of yellow.

During the treatment, as the eschar thickens the amount of arsenic should be increased to 1 to 100 or even 1 to 80.

When the black crust ceases to form from the application of the arsenic then all the cancerous tissue is gone and the wound is treated as an ordinary suppurating wound.

In non-ulcerating cancers, where the skin is more or less intact, it may be necessary to scarify or remove the overlying skin with scissors so that the arsenic will penetrate to the cancer cells.

Education of the Laity in Medicine.

A little knowledge is a dangerous thing, and in nothing else is it so dangerous as in medicine.

Theo. A. McGraw, in the *Physician and Surgeon* for April, shows some of the evil effects of a smattering of medical knowledge. From the youth who is scared almost into fits because he has nocturnal emissions to the man who can take nothing but bread and water for his stomach's sake, there is a long list of people who are well in body but sick in mind as the result of a superficial knowledge of medicine. He takes Herbert Spencer to task in regard to instruction in Physiology in the common schools and thinks that it is not so much the knowledge of the body as the knowledge of the effect of environment, that constitutes the learned man. We can not change our bodies, can not add one inch to our height, or make one hair white or black, but we can manipulate our environment and so affect our bodies. That such things should be studied to make the child generally intelligent is met by showing that general information is not a desirable thing as it is picked up by a kind of mental dissipation, on the streets, by reading newspapers, from chatauquan lectures, or university extension courses, and is inexact, inaccurate and incomplete.

He admits that physiology may be studied as a branch of natural science, but not as a philanthropic project.

He enumerates several cases where close attention to certain parts of the body induced simulation of morbid processes.

Exophthalmic Goiter.

According to Emory Lanphear, in the *St. Louis Medical and Surgical Journal* for May, there are three groups of cases as follows:

Those dependent upon changes in the central nervous system, in which no operative measure can be of benefit.

Those due to disease of the cervical sympathetic, in which excision of the ganglia, particularly the inferior, may give relief.

Those arising from excessive thyroid secretion, in which thyroidectomy may effect a cure.

Illustrative cases are given under each group.

Fecal Fistula.

In speaking of the treatment of persistent fecal fistulæ, I. S. Stone, in the *American Journal of Obstetrics* for June, says that we must, for obvious reasons, first remove any foreign body, such as silk or other ligatures.

That attempts at skin closure or by cauterization or curettement of persistent fecal fistulæ are generally unsuccessful.

In all cases where a fistula connects with a superficial coil of intestine, the method of Greig Smith should be tried before resorting to more radical operations.

In deep-seated fistulæ requiring abdominal section we must choose between excision and some form of anastomosis, for we will rarely find the case so simple as to permit inversion of the fistulous portion and direct suture.

In operating for deep-seated fistulæ we must not fail to liberate imprisoned bowel, so as to restore the normal peristalsis, permit free motion of intestinal coils, and direct the fecal current in its proper course.

In recto-abdominal fistula we should, if possible, convert the lower portion into a recto-vaginal fistula and secure healing of the old track before the temporary vaginal opening is allowed to close.

Fractures of the Nose.

T. A. DeBlois read a paper on this subject before the American Laryngological Association and which is reported in the *Journal of Laryngology* for June.

He said that "broken" noses, so-called, were not, as a rule, really fractured. They were rather cases of bony displacement and dislocation.

They might be classified according to the degree of injury and also according to the relation of the parts involved. There might be a dislocation (not fracture) of the nasal bones—i. e., a solution of bony continuity—or there might be a fracture of the nasal process of the superior maxilla or of the zygoma. Injuries might also result during parturition or from nursing or sleeping, from the constant impact of the nose, delicate at this period, against the mamma or the pillow. Then, again, there were the cases occurring from falls, blows, and collisions. In the "upper-cut" blow of the boxer there was injury to the septum, followed by swelling, possible abscess, and detachment from the subjacent parts. The "side" blow gave a double dislocation of the nasal bones, while in the direct "front" blow the internal nasal border was driven downward and outward. Treatment consisted in the reduction of the dislocation,

which might require a general anesthetic. These flat noses might be properly manipulated so as to dispense with external apparatus. For an internal splint, a bit of stiff rubber tubing inserted by means of a closed pair of scissors (well greased so as to facilitate their withdrawal) might be of service. The elastic recoil of the rubber slowly acting will often force a dislocated nose into place, though some few days might be required to produce the full effect. Plaster-of-Paris bandage made an excellent external splint. Illustrative clinical cases were then described.

Facial Neuralgia.

A new and simple method of relief for this condition is brought forward by W.C. Belt in the Medical Sentinel for April.

It is simply to direct the patient to place the hand opposite the side on which the neuralgia is felt in a basin of water as hot as can be borne. He claims that relief will be experienced in less than five minutes.

His explanation, of the action of this procedure, is that the two nerves endowed with the greatest number of tactile nerve endings are the fifth and the median, and their motor areas in the cortex are not only adjacent but actually overlap. As the fibres cross in the cord he expects a powerful tactile impulse conveyed from, say the left hand, to affect in some degree the cortical center of the fifth nerve of the opposite side.

He cites several cases in which its beneficial action was shown.

The method is so simple that without cussing or discussing, it may be tried in a number of cases and if without benefit, it will be without harm.

It would be a dreadful set-back to the operation of removing the Gasserian ganglion if this method is worth anything. Patients of all classes will prefer holding a hand in hot water all the afternoon to having the base of the brain scooped out with a gouge.

Gastro-Intestinal Disorders.

H. W. Beltmann, in the Cincinnati Lancet-Clinic for June 23d, discusses some unusual types of gastro-intestinal disorders, and takes occasion to condemn the habitual way we have of treating chronic disorders of this kind. He mentions a case which had been treated for some time with tablets of some intestinal antiseptic, but under castor oil and colonic irrigation, scybalous lumps appeared in the stools and a tender lump in the right side entirely disappeared.

In many cases of chronic diarrhea we

need to carefully clean out the bowel as in the acute variety.

He further calls attention to the fact that gastric ulcer may be simulated by catarrhal colitis and enteroptosis.

Small masses of fecal matter may lodge in the large bowel and set up an irritation which may persist for weeks or months.

In certain cases enemata, especially if continued for a long time, may be injurious and a laxative should be substituted.

He advises that we avoid all radical measures in the treatment of conditions about which we are not sure.

Pain about the umbilicus may be caused by rectal disease and gastralgia may be the manifestation of gall stones.

Formaldehyde as a Killing and Fixing Agent.

T. P. Carter, in the American Microscopical Journal for April says that formaldehyde has a much wider field of usefulness as a killing and fixing agent.

He thinks the strength of the solution in common use is not sufficient for the best results and the addition of mercuric chloride is not necessary.

The formula which has yielded the best results in his hands for all tissues is

Formaldehyde, 40 per cent. solution,	50 cc.
Distilled water,	50 cc.
Glacial acetic acid,	5 cc.

Tissues are killed and perfectly fixed by this solution in from six to twelve hours, though no damage is done if left in for 24 hours. From the fixing solution the tissues are placed in 50 per cent. alcohol for an hour, then 75 per cent. for 15 to 30 minutes, then 95 per cent. for 15 to 30 minutes.

From this to paraffine the process is the usual paraffine method.

Heart Murmurs in Infancy and Childhood.

That the very young may have functional murmurs of the heart is doubted by many observers, but Jacobi, in the Medical News for May 12th, in discussing this subject, while admitting their rarity, reports a case of undoubted functional murmur in a child of 13 months as shown by post mortem examination.

The baby had pneumonia with pus in the urine and a systolic murmur.

The lung cleared up but it died of septic fever and on autopsy the heart was found normal. He cautions against mistaking an extracardial murmur for an organic or functional one.

While in most cases a murmur means organic valvular disease, still the latter

does not always mean that we will find a murmur.

He reports a case of pneumonia, endocarditis and meningitis in a child two years old with recovery from the endocarditis, but death was caused by persistence of the meningeal inflammation.

As to the causes of some of the murmurs in early life he mentions persistence of the ductus arteriosus as causing a loud systolic murmur over the sternal end of the second left intercostal space.

In congenital stenosis of the pulmonary artery there is a systolic murmur of the second left intercostal space.

Absence of the ventricle is always associated with stenosis of the pulmonary artery, and in such cases there is a loud murmur over the sternum which extends far down and upward into the vessels of the neck.

A class of cyanotic cases owes its origin to an arrest of development of the common arterial trunk.

In infants and children myocarditis is usually parenchymatous and the most intense and persistent changes are found after influenza and diphtheria.

Internal Hemorrhoids.

In small hemorrhoids, especially the perineal form, often found in females, the injection method of treatment is recommended by Geo. J. Monroe in the Cincinnati Lancet-Clinic for May 12th.

This treatment, he says, can be used successfully in all tumors that are above the sphincter muscles—that is not grasped by the sphincter.

The solution he uses is

Carbolic acid (Calvert's) saturated solution, 3i
Olive oil, 3iii
M. By placing bottle in warm water.
Sig. Inject from five to ten drops in each tumor.

Some pain is to be expected, but in selected cases the cure is permanent.

The preparation of the patient should be as thorough as for any other surgical method of treatment.

We must be careful not to inject anything but the hemorrhoid and when this turns white it indicates that enough of the solution has been used. When the needle is withdrawn hold the finger over the opening to prevent any escape of fluid.

Smear the tumors with vaseline and press them up, allowing the patient to remain in the recumbent posture for at least half an hour. He should then go to bed and remain until the slough comes away.

Ideal Ration for an Army in the Tropics.

In the Boston Medical and Surgical Journal for May 24th, Edward L. Munson concludes his prize article on the ideal ration for an army in the tropics. He says that the only changes advisable are chiefly in the line of a reduction in quantity of the food at present provided by a too generous government, though he admits that the sugars and starches should be slightly augmented, but their increase is small when compared with the considerable reduction of nitrogenous and fatty matter proposed.

His ideal ration consists of four tables which are alternated.

Table one consists of fresh beef, flour, beans, potatoes, dried fruit and sugar.

Table 2: Bacon, hard bread, beans, dried fruit and sugar.

Table 3: Fresh beef, soft bread, potatoes and onions, dried fruit and sugar.

Table 4: Fresh fish (cod) whole, soft bread, rice, potatoes and tomatoes, dried fruit and sugar.

Alternation of these tables give 363½ grammes of carbon, nitrogen to carbon 1:21.

Infarcts of the Placenta.

The frequency and significance of infarcts of the placenta, based upon the microscopic examination of 500 consecutive placenta, is discussed by J. W. Williams in the American Journal of Obstetrics for June. He concludes that infarcts measuring at least one centimetre in diameter were observed in 315 out of 500 consecutive placenta (63 per cent).

Smaller infarcts, many just visible to the naked eye, were observed in the great majority of placenta, while microscopic examination revealed early stages of infarct formation in every full-term placenta.

The primary cause of infarct formation in the great majority of cases is to be found in an endarteritis of the vessels of the chorionic villi.

The primary result of the endarteritis is coagulation necrosis of the portions of the villi just beneath the syncytium, with subsequent formation of canalized fibrin. As the process becomes more marked the syncytium likewise degenerates and is also converted into canalized fibrin, which is followed by the coagulation of the blood in the intervillous spaces, which results in the matting together of larger or smaller groups of villi by masses of fibrin. Later the entire stroma of the villi degenerates, so that eventually the infarct consists entirely of a net-work of fibrin.

The part played by the decidua in the

production of infarcts has been greatly over-estimated by many observers. It is more than probable, in many cases at least, that the tissue which they designated as decidua is really fetal ectoderm.

Moderate degrees of infarct formation possess no pathological significance and exert no influence upon the mother or fetus, and are to be regarded as a sign of senility of the placenta, analogous to the changes which take place in the villi of the chorion leve at an early period.

Marked infarct formation is not infrequently observed, and often results in the death or imperfect development of the fetus. It is usually associated with albuminuria on the part of the mother, though at present we cannot account satisfactorily for the relationship between them.

Infarct formation is not particularly marked in cases of acute eclampsia, being usually observed only in those cases which were preceded by marked albuminuric symptoms.

There is no evidence in favor of the bacterial origin of infarcts.

Interval between Cases of Yellow Fever.

H. K. Carter, of the Marine Hospital Service, in the New Orleans Medical and Surgical Journal for May, discusses the interval between infecting and secondary cases of yellow fever. In other words how long in time is it between the development of a case of yellow fever in an uninfected place and the development of the next case contracted from the infection of the first case.

After a careful study of the cases occurring at Orwood and Taylor, Miss., he concludes that the secondary cases develop in the third week. These secondary cases form new foci, the original one also remaining active, and from two to three weeks another group of tertiary cases appear and the disease is scattered.

While there is no definite limit of time at which we would call the situation "safe," still hope of safety increases with the passage of the third week and beyond without the development of any secondary cases.

Insanity in Virginia.

Wm. F. Drewry, in the Medical Register for April, discusses the present status of insanity in Virginia. The State has four hospitals for the cure of the insane and out of a population of 1,700,000, two-thirds being white and one-third colored, 3,100 are insane, or nearly 1 in 600 of the popu-

lation. In the past twelve years the number of insane persons has doubled.

They do not tolerate county or poorhouse system of caring for these unfortunates, but many are kept for some time in jail until there is room for them in one of the hospitals.

The author strongly condemns the jail keeping of such cases, as it is more expensive to the State and most injurious to the patient.

The appropriation for the present year is \$685,000; \$610,000 being for the support or maintenance in the hospitals, \$35,000 for building purposes and \$40,000 to defray expenses of lunacy commissions and patients in jail.

This is an average per capita cost of \$120.00 or less which covers all expenses.

Treatment of Scarlatina.

The modern treatment of this disease is discussed by F. P. Henry in the Medical Times for May. He gives no specific treatment, but simply outlines a general plan which is as far as we know at present.

Isolation, is the first thing, in a comfortable room with a moderate amount of covering on the bed. Milk is the diet, during the eruption and during convalescence. Water *ad libitum*, lemonade, tamarind water and fruit syrup.

Warm bath daily in ordinary cases. Special attention to the mouth and throat.

Cold bath for hyperpyrexia, though he would rather see a high temperature than a low one in scarlet fever, but if it continues above 105 then the cold bath. Cold to the head is also useful. For the delirium or agitation give chloral, for stupor alcohol, carbonate of ammonia, and coffee. Carbolyzed vaseline locally.

For the different complications use the same treatment as if they existed independently.

A child should not return to school until desquamation is complete. The hair and skin should be scrubbed with carbolic soap.

The hair should be cut off, as it will fall out anyway.

Salol for Tapeworm.

The Medical Age for June 25th states that Galli-Valerio, in Therap. Monatsh. for March, reports upon a case of tapeworm in which, on the strength of its being decomposed by the intestinal juices into salicylic and carbolic acids, he successfully prescribed one gramme (15 grains) of salol. A fine specimen of *Bothriocephalus latus* was voided by the patient within a few hours after the salol was taken.

Laminectomy for Diseases and Injuries of the Spinal Cord.

In the Boston Medical and Surgical Journal for June 28th, Samuel Lloyd reports 15 cases in which he has operated for paraplegia resulting from Pott's disease of the spine. In all, 118 operations have been performed. Operation of itself is not so dangerous, but death usually results later from the tuberculous process. In advanced cases operation is of little advantage unless the abscess is located posteriorly. Non-operative treatment should be thoroughly tried, and if not successful, operation should be performed early without waiting for ascending or descending myelitis. Pressure is usually caused by tuberculous debris. Operations in the lower part of the spine show the most favorable results. Chipault has collected 22 laminectomies for tumors, with 16 recoveries. Permanent cure is generally not to be expected, because the growths are usually malignant.

In case of fracture there is no hope if the function of the cord is destroyed by pulpification. Obliteration of the deep reflexes generally contraindicates operation. We should wait until shock is passed and then operate if there is not complete destruction; if hemorrhage is producing extension of the symptoms; if there is improvement at first and the symptoms become worse later; or if there is full recovery, with paraplegia and symptoms developing later, probably from the formation of callus. The mortality of operation is now about 50 per cent., but we should give the patients what little chance there is of recovery.

Movable Kidney.

According to the New Orleans Medical and Surgical Journal for May, W. W. Keen, in operating for this condition, begins the incision at the outer border of the erector spinæ muscle, half way between the twelfth rib and the crest of the ilium and it is carried well forward. The advantage of this incision is that it can be extended to give as much room as is desired, and the presence and condition of the other kidney can be noted.

If possible the kidney is sewed in place without opening the peritoneum. otherwise it is opened widely and exploration made. The stitches are not to hold the organ fast but only to keep it in place until adhesions. Hence great stress is not laid upon the stitching process, but he does emphasize the necessity of separating all the material from around the kidney, in order to get the organ clear and the wall bare, so that the

kidney may come directly to the wall for the adhesions to form. This separation of adhesions and clearing of the kidney is of far more importance than any question of stitches.

Three or four Kangaroo tendon stitches are passed through the capsule and through a generous portion of the cortex as well and the anchoring made to the lumbar fascia. Such cases are always closed without drainage.

Anesthetics.

In discussing the selection of the anesthetic in surgery, Wyeth, according to the Indiana Medical Journal for May, said that during the first few years of his practice he had employed ether almost exclusively, and during this time had not failed to note the great irritation sometimes caused by this anæsthetic agent, and the great difficulty of inducing complete narcosis in alcoholic subjects without producing asphyxia. He had, therefore, been led gradually to make more and more frequent use of chloroform. At present, in about 75 per cent. of his operations he employed chloroform, either wholly or in some stage of the narcosis. In using chloroform he invariably injected beneath the skin one-fourth of a grain of morphine and 1-150 of a grain of atropine about fifteen minutes before commencing the anæsthesia. These agents stimulated the heart, and allayed to a considerable extent the anxiety of the patient. He believed chloroform was dangerous chiefly to the heart, and that it was during the early stage of its administration that this danger was imminent. The depression of the heart, when observed at all, occurred almost invariably prior to the induction of complete narcosis.

Post-operative Treatment of Abdominal Section in Women.

Before the American Medical Association, Walter B. Chase read a paper on this subject. As reported by the Medical Record for June 23rd, he said that, other things being equal, the best after-results in these cases followed proper preparation of the patient and good hygiene. In closing the abdominal incision he recommended the use of chromicized catgut for layer suturing, and silkworm gut when the through-and-through method was followed, the suture not being tied too tightly. He condemned buried unabsorbable sutures, since they remained as foreign bodies liable to cause pain and ulceration. Removal of the through-and-through sutures was recom-

mended after from eight to twenty days, the alternate sutures being removed and the others allowed to remain a few days more. He recommended greater latitude of position after laparotomy than had usually been permitted. In the treatment of shock he advised before the close of the operation the administration of a high rectal enema of a pint of hot salt solution and an ounce of whiskey, together with proper cardiac stimulation. Hemorrhage could be immediately arrested by compression or ligation of bleeding vessels; when practicable the operation should be performed with the patient in bed. Flatulence, nausea, and vomiting, if due to ether narcosis, would subside spontaneously. In nausea he advocated hot water in drachm doses frequently repeated; if vomiting persisted, he gave high rectal enemata of water containing two or three drachms of a saturated solution of sulphate of magnesium at intervals of about two hours until the bowels were opened. If nausea was not present twelve hours after the operation, teaspoonful quantities of hot water or chicken broth at intervals of an hour were given. The quantity might be increased if it was well borne, and it might be followed by beefsteak, lime-water, and milk. The quantity and quality of the urinary secretion should be watched. Evidence of injury to the urinary tract and diminished or suppressed renal secretion, partial or entire, called for prompt and energetic measures, such as saline laxatives, pure water by the mouth, and salt solution by rectal enemata, diaphoresis, and if the arterial pressure was diminished digitalis and persistent dry cupping.

Dysmenorrhea and Electricity.

In discussing the treatment of dysmenorrhea before the American Medical Association, G. Betton Massey said, (Medical Record, June 23rd), that menstrual pain was not due to obstruction, but to the attempt of nature to perform a cyclic function with organs that were undeveloped or diseased. The obstruction theory had been disproven by Schultz, by the speaker, and others, who found no accumulation, and a canal amply capable of drainage. In the obstinate cases that had been proved rebellious to medicinal treatment of the neurotic elements, he found catarrhal endometritis usually present, and obtained cures by the use of the galvanic pole, preferably mercurialized, within the uterine cavity. Dilatation was condemned as unnecessary and at times harmful. The treatment should not be intrauterine unless a persistent discharge was present.

Ectopic Gestation.

According to the American Journal of Obstetrics for June, an interesting case of this affection is described by Severeano, (Jahrb. f. Kinderhk., Vol. 51, No. 4). The patient, 32 years old, had an occlusion of the nasopharynx by adhesion of the soft palate to the posterior pharyngeal wall, due to persistent ulceration of this region at the age of 12. Menstruation at 14, painless, irregular, profuse; married at 20; one child at term, which died later of convulsions. Ten years ago, after exertion, had a sharp pain in the right iliac fossa and temporary amenorrhea. Eighteen months ago menstruation ceased and the abdomen gradually enlarged, but without pain, until two months before operation. A semi-solid, slightly fluctuating tumor to the right of the median line, extending from the iliac fossa to the umbilicus, and fluctuation in the right cul-de-sac, were found upon examination. Operation revealed a tumor the size of an adult head, adherent to neighboring organs, containing a sero-purulent fluid and a dead and macerated fetus, cord and placenta. The cyst was enucleated and the abdomen irrigated and drained. Death.

Imperative Ideas in the Sane and their management.

According to the Medical News for May 26th, Edward B. Angell read a paper on this subject before the American Neurological Association at its last meeting. He pointed out that in the normal mind there are words, phrases, emotions, or ideas, which recur and force themselves against the will. When the mind is morbid, these demands of imperative ideas become a disease against which the most strenuous efforts of the will seem impossible. The essayist's idea was to ascertain how far our present knowledge of these imperative ideas will enable us to recognize their significance. In order that these morbid ideas may be investigated, it is essential that the mind be studied in its automatic activity, a state which obtains in conditions of sleep, hypnosis, somnambulism, hysteria and insanity, and during these conditions normal evolution is largely or entirely suspended.

Dr. Angell believed hypnotism holds out a certain form of relief, and only through its influence a state of primary disturbance, existing as a subconscious idea in the mind of the patient, could be ascertained. In the use of hypnosis the patient should invariably be carefully awakened and left in a calm mood at the end of the seance.

Internal Carcinoma in Children.

According to the Medical Review for June 16th, Tuppinger, in Wiener Klin Wochens., No. 17, reports a case in a girl 14 years of age who was seen after a three weeks' illness, which began as a colic and later much pain at stool, and bloody discharges developed, with general abdominal pain and meteorism, a light icterus, but no cachexia. A small anal fissure was found and cauterized, after which the pain left, and the child seemed to improve; but the distention of the abdomen remained, and prevented satisfactory palpation. The child died, however, rather suddenly, in an apathetic condition. At autopsy a cylindercelled carcinoma of the sigmoid flexure, with stricture and metastases, was found on the peritoneum and in the liver. In the literature of 10,000 cases of carcinoma only 19 were found in the first and second decades; 11 cases of intestinal carcinoma in children under 14 are on record, usually of the colon—half in the cecum and half at the sigmoid flexure. These cases are given in detail. In general cachexia and anemia are usually wanting in cancer of children; the local symptoms stand out prominently. According to Nothnagel, in children expectancy of life is from one-half to two years, and that the difference between cancer and sarcoma is the greater constitutional changes in sarcoma, and the fact that in sarcoma there is usually a dilation instead of a stricture of the intestine.

Vaginal Fistulæ of the Ureter.

Lambert, in L'Echo Med. du Nord for April, quoted in International Medical Magazine for June, classes all forms of fistula which cause the flow of urine through the vagina under the general term, vaginal fistulæ of the ureter; and, aside from the congenital, which are rare, divides them into three classes, according to their origin: Organic, which are produced by some ulcerative process in the ureter itself and may be of tuberculous or syphilitic origin, or are caused by cancer of the uterus when surgical interference is contraindicated; puerperal, resulting from some form of difficult delivery, and generally on the left side; operative, usually on the right side, nearer the kidney and almost always complete; that is, the ureter is entirely cut off. Operative injury of the ureter is more liable to occur in vaginal than in abdominal hysterectomy. Of the various methods for the cure of vaginal fistulæ of the ureter, Lambert considers that the best and most rational is that which attempts anastomosis of the ureter with the bladder, either by

the vaginal or abdominal route. The former presupposes the possibility of dissecting out the renal end of the ureter, but its discovery is often very difficult, or impossible, because the ureter is lost in cicatricial induration, or in operative fistula, is inaccessible. For these reasons the writer prefers in most cases the abdominal incision and describes the operation as follows: The incision is made upon the median line about 16 cm. in length. The ureter is found near the bifurcation of the iliac vessels, followed as far down as possible, punctured, and sectioned transversely, and a sound of proper size introduced, and its free extremity placed in the curved trocar of Chassaignac, previously introduced into the bladder, at the extremity of which an incision 1 cm. long has already been made. The trocar is then withdrawn and the ureteral sound passes out through the urethra. The ureter and bladder are then sutured with catgut, and the subsequent peritoneal sutures form a collarette of protection. The ureteral sound is left in position 6 to 7 days to protect the sutured tissue from the septic or irritating infiltration of urine. Lambert reports a case thus operated upon with most excellent results.

Fracture Dislocation of the Spine.

A case of this kind is reported by A. W. Mackintosh, in the British Medical Journal for May 5th, quoted by the Medical Review for June 16th:

A strong, healthy man, aged 32, as the result of a fall, showed depression of the eleventh dorsal spine and prominence of twelfth dorsal and first lumbar. The lower limbs were flaccid and the patellar, plantar and cremasteric reflexes were abolished. No sensation of any kind existed in the legs or lower trunk cysts about the umbilicus, the upper limit of total analgesia and thermo-anesthesia higher and sharper than total anesthesia, leaving a zone of incomplete anesthesia. In addition there was marked constipation and incontinence of feces and urine, with an incomplete emptying of the bladder. During illness was noticed a rapid wasting, and loss of faradic excitability noticed in all leg muscles; vaso-motor and trophic changes in anesthetic area. Cystitis appeared with diminution in capacity of bladder and simple dribbling of urine. Uremic symptoms supervened, with death in 3½ months. Necropsy showed a fracture dislocation of xi. and xii. dorsal vertebræ, complete division of cord below origin of xii. dorsal roots, destruction of upper three or four lumbar segments. The sacral cord was much com-

pressed and disintegrated; xi. intervetebral foramen on right side obliterated by callus; complete degeneration of the xi. dorsal posterior root right, but not left side, also of xii. dorsal posterior roots; anterior sacral roots considerably degenerated.

Secondary Cataract.

W. H. Bates, in the New York Medical Journal for July 7th, gives the result of an experimental study of this subject in rabbits.

His conclusions are as follows:

Secondary cataract in the rabbit is composed of new connective tissue, usually, together with the folded posterior capsule of the lens. But the opacity of the structure occupying the pupillary area is due to the new connective tissue and not to the capsule.

The *formation* of secondary cataract in the rabbit begins with the accumulation in the anterior chamber of a coagulable fluid at the time of operation. Fibrin appears in the pupillary area from the coagulation of this fluid. Later, new connective tissue replaces the fibrin.

The *prevention* of secondary cataract in the rabbit may be secured by performing a quick operation, closing the scleral or corneal wound with sutures, and restoring the anterior chamber with normal salt solution.

The studies recorded in this paper have been limited to the rabbit, and, while they afford a strong presumption that secondary cataract in man also is due to a new formation of new connective tissue in the pupillary area, this can be definitely determined only by the study of human material. This study is now under way.

Membranous Colitis.

W. H. Thomson, in the Medical News for June 2d, discusses the treatment of membranous colitis.

He recommends free irrigation with normal salt solution with 5 drops of oil of peppermint to the pint. Three to five gallons at a temperature of 100 deg. F. are used once in twelve hours. At the end of the irrigation we may use 60 to 100 grains of resorcin in a gallon of water, being careful that all is expelled afterwards.

Once a week a pint of hot water, containing 30 to 40 grains of silver nitrate, is used instead of the resorcin.

This treatment is soothing and gives great relief, but it is not curative.

As for medicines, he thinks well of small, alternative doses of castor oil given half an hour before meals or one hour after meals. He uses an emulsion containing half to one dram of castor oil to a tablespoonful. This

must be continued for months. Nitrate of silver with turpentine resin is also recommended.

After taking the silver for six weeks, sulphate of copper is substituted.

For the gastric symptoms, resorcin with tincture of nux vomica, sodium benzoate, bismuth salicylate.

For constipation, phosphate of soda with the salicylate of soda or sulphate of magnesium and massage. Diet is important, beans, corn, spinach, and the woody vegetables and oatmeal are excluded.

The patient is encouraged to eat meat, poultry, eggs, zoolak or kumyss, peptonized milk and most cereals with instructions not to care what will happen. Out-door exercise and change of air in general. In otherwise hopeless cases, he endorses Hale White's recommendation of making an artificial anus in the right flank, thus giving prolonged rest to the colon.

Mould in the Stomach.

Max Einhorn contributes an illustrated article to the Medical Record for June 16th on the occurrence of mould in the stomach and its probable significance.

After reporting several cases he says that the mould formation is met with in two groups of gastric affections; first, in cases of intense hyperchlorhydria, (occasionally attended with hypersecretion and vomiting); and second, in gastralgia with normal or reduced gastric secretion.

He is not sure that the mould is the cause of the symptoms in such cases or simply the result of the disease process, but he considers it plausible that the mould fungi at least increase the severity of these abnormal conditions of the stomach. Irrigation of the stomach will remove them mechanically and afterward an antiseptic solution of silver nitrate is beneficial.

Phosphorus in Rickets.

According to the Medical News for May 26th, an extensive literature is quoted by E. Kossowitz (Therap. Monatshft., April) to support his views that with the introduction of phosphorus a new era in the treatment of rachitis has begun. Most authors are unanimous in the opinion that phosphorus aids the process of ossification, and that the convulsions, laryngospasm, insomnia and restlessness are better benefited by this than any other drug. The records of over a hundred thousand teach the author that phosphorus is the specific in rickets. He recommends it dissolved in cod-liver oil in which form it keeps well for months.

Etiology of Idiocy and Imbecility.

Pediatrics for July 1st gives an abstract of a paper on this subject by Martin W. Barr, which embodies his studies on the subject for the past 15 years.

The three classes of causes of idiocy and imbecility may be summed up under the headings of heredity, malnutrition and accident.

The speaker reviewed the literature of the subject and gave the results of his own investigations. Out of a total number of 3,040 cases, heredity was the etiologic factor in 1,216, or over 40 per cent. Of these, 13 per cent. had a family history of idiocy and 5 per cent. of insanity. He said that consanguineous marriages do not result in imbecility or idiocy of the offspring unless there is a neurotic taint in the family of one or both of the parents. Of the cases investigated, only 1 per cent. were due to consanguineous marriages, and hence such marriages are not dangerous unless there is a predisposing neurotic factor. Marriages between persons with a neurotic taint should be prohibited by law. Phthisis was present in the family in 9 per cent. of the cases, and inebriety in 3 per cent. Malnutrition from all causes was the etiologic factor in 1,092 cases, or 35.20 per cent. Of the latter, 1 per cent. were due to accidents at birth.

Loss of Hair.

The baldheaded man does not get much sympathy in this world, and as for any reward it must be in the world to come. In this country they are the legitimate prey of the quacks and fakirs, that is they have been, and it is with joy and gladness that we notice a scientific article on this bare subject, by G. T. Jackson, in the Medical Record for May 26th.

A study of 300 cases is the basis of his communication, and we give his treatment in his own words.

"To state it clearly, my treatment for the ordinary case of loss of hair with dandruff is as follows: I first attend to the general condition of the patient. The patient is given one of the sulphur preparations and is directed to use it once a day for three days, and then to wash the hair and scalp. Immediately after the hair is dried, the ointment is again applied and repeated every other day for ten days. The scalp is again washed and the ointment continued twice or three times a week until the dandruff is controlled, the washing being repeated from time to time. When the scalp is in good condition massage is ordered. If the patient will not use an ointment I

order a lotion of resorcin, at first three and afterward five and ten per cent. strength, to be used morning and night. If the sulphur is used in the form of what my druggist calls 'sulphur cream' it is not at all objectionable, and being used but twice a week or so, it is not so much trouble as it is to use a lotion twice daily. For a case of loss of hair without any apparent trouble with the scalp I rely mostly upon massage, using the sulphur preparation occasionally to keep the scalp a little oily."

Membranous Conjunctivitis.

Four cases of this rather rare condition are reported by Thomas McDavitt in the Railway Surgeon for May 29th.

In three of the cases there was evidence of transmission from personal intercourse. In two of the cases antitoxin was used, but the membrane formed and reformed several times.

In all of the cases except one, which was very mild, there was subnormal temperature with very slow pulse, 40 to 60.

All recovered.

Neuroses in Children.

The present system of educating children is given as the cause of many nervous breakdowns by Arthur D. Holmes in the Physician and Surgeon for April.

While the neurotic taint may be due to phthisis, syphilis or alcoholism in parents, it is brought to the front by the improper method of education.

Neurotic children may be gifted mentally and for this reason extra work is put upon them in forcing them to the front.

He thinks that parents should be enlightened and taught to guard against the dangers of over-study. Teachers also should watch their pupils and report promptly any significant defect in a child either mental or physical.

The following important points are emphasized:

The neurotic condition is not properly recognized by teachers and parents.

Failure on the part of principals or superintendents of schools to recognize the different abilities, et cetera, of different scholars.

Neglect of parents to study the mental peculiarities of their children enough to tell when the danger point is at hand.

Finally the impossibility, under the present conditions of medical practice, of properly instructing parents and teachers in regard to the dangers which beset the neurotic child.

Nerve Injury-

B. B. Eads, in the Medical News for June 23d, gives the histories of several instructive cases of successful primary sutures of the median and ulnar nerves.

Statistically, he collected 294 cases of nerve-repair in addition to his own, distributed thus: Immediate or primary operations, 62 successes, 62 improvements, 49 failures; secondary or late operations, 61 successes, 61 improvements, 19 failures. His conclusions are that as a rule a primary suture is the better, consistent asepsis and antisepsis, no drain-tubes, no chemical antiseptics, catgut transfixion and fine silk sutures in the sheath, no tension, careful approximation, relaxation by position, removal of the restored nerve as far from the probable site of scar tissue as possible.

Obstetric Cases in Private Practice.

Some points in the management of obstetric cases in private practice is given by J. B. Cooke in the Medical News for June 23d.

An accurate history of every case is valuable and for this purpose he uses a three-card system, one for pregnancy, one for labor, and one for the puerperium. These cards are of such size as can be conveniently carried in the pocket and they have spaces for all necessary data.

The urine should be examined within a week of the patient's first visit and monthly until the end of the seventh month, after which analyses should be weekly or oftener if necessary, until labor has taken place.

He has his own bottles properly labeled to give out to the patient to be returned at a set time.

Absolute asepsis is very important, as a matter of course, from the beginning to the end of labor. So-called aseptic bags he does not think much of, for if called hurriedly from one case to another they may cause delay.

Be prepared to boil all instruments for each case, having already prepared gown, gauze, cotton, cord dressings and sutures of silk and catgut.

Puerperal Inguinal Parametritis.

G. E. Herman, in the British Medical Journal for May 26th, reported in the Medical Age for June 25th, says that cellulitis after delivery is usually inguinal because during pregnancy the cellular tissue at the side of the uterus becomes looser, and the peritoneum is raised above the brim of the pelvis, so that at the end of pregnancy there is loose cellular tissue extending from

the side of the uterus to the groin. Hence inflammation of pelvic cellular tissue after delivery tends to spread up to the groin. Apart from pregnancy the cellular tissue is not so loose, the peritoneum is not raised up toward the groin, and so cellulitis is seldom inguinal. Puerperal inguinal cellulitis is commoner than any other kind.

In the treatment of these cases the essential thing, says the writer, is to keep the patient at rest, and to maintain her strength by suitable food, while relieving her pain by narcotics if necessary. This is all that is essential. There is no drug that has been proved to have any influence on the absorption of pelvic cellulitis. We can please the patient, perhaps relieve her pain, and certainly do no harm, by applying fomentations made with sedative drugs to the part. It is possible that the fomentation may hasten the absorption, but we have no evidence of it. When suppuration has taken place, the important thing is to let out the pus as soon as possible. In some cases relief can be given by making an incision, and so relieving the tension even before pus is discovered. But in the inguinal region it is not prudent to do so on account of the nearness of the peritoneum; because if we have to search for pus, we may open the peritoneum; and then, if there is only a small quantity of infective pus, that may find its way into the peritoneum and set up peritonitis. In other parts than the inguinal region that practice can be carried out more safely. The important thing in the case of suppurating cellulitis is to open the abscess and let out the pus as soon as possible, and then keep the patient quiet while the abscess is healing. Few effects of surgical treatment are more striking than the rapid improvement in cases of parametritis when the pus has been let out.

Pelvic Peritonitis.

L. von Luigen in Med.-Chir. Centralbl., for April 6th, quoted in Medical News for May 26th, recommends expectant treatment as far as possible in all cases of purulent pelvic peritonitis originating in the internal organs of generation. When such means have failed to restrict the progress or cure the condition and operative interference becomes necessary, he recommends in all cases vaginal drainage, irrigation and tamponade of the abscess. By digital palpation through the wound at the time of operation, the site, extent and complications of the disease can generally be determined and often drainage made more adequate than it would otherwise be. After the discharge is absent or at a minimum

resort is then had to the usual local and systemic means to promote absorption of the exudate. Twenty-six cases are cited, showing how well this management results and how exceptional is the necessity of laparotomy for the disease. The one objection to it is that it takes longer to cure a patient by these means than by a laparotomy.

Puerperal Eclampsia.

Five cases of this dread condition are reported by J. F. Watt in the *Medical Sentinel* for May.

Three of the cases were primipara and two multipara, and in one of the former class the convulsions preceded a twin delivery by forceps.

Morphia hypodermically in large doses, not less than one-half grain, is heartily recommended by the author.

Chloroform he does not think of much use or altogether safe in this condition.

To protect the tongue is important, as if it is once caught between the teeth it is difficult to relieve without severe laceration but easily prevented if we act promptly.

Out of the five mothers and six children, five mothers and five children lived, which is not a bad record.

Rupture of the Parturient Womb.

A. V. Wendel in the *Medical Record* for May 26th, writes of the treatment of rupture of the parturient womb with a critical review of the vaginal operation. After reporting three cases in detail he concludes that in threatened uterine rupture the woman is to be delivered at once by the method which does not increase the excessive intra-uterine tension.

After rupture occurs, delivery by the natural passages is permissible only if the uterine injury is not aggravated thereby.

If the true conjugate diameter of the pelvic inlet measures less than 8 cm. a completely intra-peritoneal fœtus should be delivered by abdominal section.

But if the conjugate measures 8 cm. or more, the uterus should be removed by vaginal hysterectomy and the child delivered by the feet through the natural passages.

If life is detected in the child after the mother's death, the post-mortem section should be performed.

The uterine tamponade is useful only as a dressing to prevent intestinal prolapse or to retain reposed loops of intestine within the abdomen until the case can be submitted to operation.

Conservative surgery exposes the woman

to the serious risk of subsequent rupture, and should therefore not be elected unless expressly commanded by the patient or immediate relatives.

Vaginal suture is open to the objection that bleeding arteries in the parametrium are apt to be overlooked.

When laparotomy becomes necessary for the birth of the fœtus, the uterus is to be removed by supra-vaginal amputation, with the extra-or intra-peritoneal treatment of the stump, according to the exigencies of the case or ability of the practitioner.

Vaginal hysterectomy is the elective procedure in all cases, but should be supplemented by abdominal section whenever necessary.

Strabismus and the Family Physician.

J. T. Duncan, in the *Canadian Practitioner and Review* for July, writes of the treatment of squint in children by the family physician.

In a child aged three years or over, he would in every case (with the exceptions noted) advise a thorough examination of the eyes, so as to ascertain the refraction.

He would advise that this be done as soon as possible but if some weeks must elapse before this can be done, he would use atropine drops once, twice or three times a day in both eyes, ordering that the drops be left off for at least two weeks before the child goes to be examined.

If it be reported to him that the child needs to wear glasses, he would exercise his influence with the parents to see that they were worn.

In case of hesitancy on the part of the parents to attend to the matter, he would free himself from responsibility by pointing out some of the dangers of delay:

The child may be permanently cross-eyed.

He may be partially blind.

An operation may be needed in after years.

The operation, although it may straighten eye, will not cure the blindness.

Spastic Paralysis of Infancy.

A. Codivilla, in *Riv. Critica di Clinica Medica*, April 21st, quoted by *American Journal of Obstetrics* for June, says that this disease is at the present time considered to be almost entirely within the domain of orthopedic surgery. It is well known how physical therapy in spastic paralysis of the lower limbs, for instance, can to a great extent diminish the reflex excitability of the affected muscles, strengthen weak muscles, lengthen retracted ones, educate the centres,

as it were, to the production of better co-ordinated movements, while surgery further carries on the cure by means of tenotomy, tenectomy, myotomy, etc.

In addition to these valuable methods of treatment, the author desires to call attention to the value of transplantation and plastic operations upon tendons.

In the majority of cases of infantile spinal paralysis the vicious position and the deformity are caused by a lack of equilibrium in the forces which move the articulation. Some muscles are paralyzed and others retain their power to a certain degree, so that with every voluntary or reflex movement some muscles contract and their antagonists remain inactive. This lack of equilibrium gives rise to the vicious position or to deformities from contracture. Tendino-muscular transplantation will restore a proper balance of strength, especially if stretching and shortening of the tendons be added to secure a passive equilibrium in the normal position. This process is used with success in pedal deformities due to infantile spinal paralysis.

Septic Peritonitis.

Geo. R. Fowler reports three additional consecutive cases of recovery from diffuse septic peritonitis, in the Medical Record for June 16th.

About two months ago he reported nine consecutive cases of recovery, and so the total number is now 12. With this record his method of treatment is worthy of study.

He cleanses the neighborhood of the original focus with hydrogen peroxide, thoroughly flushes the abdomen with decinormal saline solution at 110 F., with deep pelvic drainage, and the elevated head and trunk posture to facilitate the passage of fluids from the intestinal and diaphragmatic areas to the pelvic portion of the peritoneum.

His report of one of the last cases is as follows:

Case X.—March 15, 1900; Methodist Episcopal Hospital; female, aged seven years. The patient was admitted and operated upon on the tenth day of an attack of acute appendicitis. The expression was anxious. There were extreme abdominal distention and tenderness, with persistent vomiting. The conditions were believed to be complicated with intestinal obstruction of mechanical origin. A median incision was made, the operation revealed the small intestines deeply reddened and matted together with exudate; as these were separated large quantities of sero-purulent material flooded the peritoneal cavity. The

appendix was gangrenous and perforated. It was excised; the primary focus was cleansed with partially neutralized hydrogen peroxide (diluted with equal parts of a saturated solution of sodium bicarbonate). The intestines were separated, cleared of lymph deposits wherever these were easily separable, and the peritoneal cavity was repeatedly flushed with large quantities of decinormal saline solution. A glass drainage tube was placed in the pelvis and led out of the lower angle of the incision.

After-treatment consisted of elevation of the head of the bed fifteen inches above the horizontal; an enema of saline solution every two hours. Vomiting ceased; flatus passed freely; the distention subsided. The glass drainage tube was removed on the sixth day, and substituted, on account of a reaccumulation in the pelvis, by one of rubber, which was finally removed on the fourteenth day. The head of the bed was lowered at the end of the second week. Recovery resulted.

Surgical Notes.

J. Rilus Eastman, in the Medical and Surgical Monitor for June, gives some practical surgical notes.

In regard to circumcision, he condemns the use of clamps as tending to produce swelling of the part.

He speaks very favorably of permanent catheterization after external urethrotomy, and cites cases in which he left in large soft rubber catheters for 17, 12 and 65 consecutive days with the best result in all three cases.

In many of these cases intermittent catheterization is hardly to be considered, and permanent retention is very desirable. After the use of a catheter in this manner it is easy to pass even a larger sound.

Gradual dilatation of urethral strictures, he recommends as the best treatment in the majority of cases. A practical point in this connection is that the caliber of the normal urethra varies in different parts of its course and these parts have different degrees of dilatability. hence he recommends the so-called Kohlmann dilators, which will dilate any given segment without injury or irritation to the other portions.

Janet's plan of irrigation he commends, but the Valentine apparatus he does not like as it is hard to keep sterile and is too cumbersome.

A large, blunt-nozzled metallic syringe and a napkin he thinks better than the Valentine apparatus.

In closing he calls attention to coccygeal teratoma and thinks they merit more consideration than they receive.

Sarcoma of the Bladder.

William G. Bunce, in the Cleveland Journal of Medicine for May, reports a case of sarcoma of the bladder in a boy 14 years of age.

When first seen at a children's home it was hardly possible to make out any distinct disease, though he was apparently unwell. The urine showed some albumin, but no casts or pus. Later he had a severe hemorrhage with retained blood clot in bladder, which was dissolved by pepsin. The hemorrhage recurred with increasing cystitis for which a perineal section was done and a tube left in. He gradually emaciated and died. Post mortem showed large mass almost entirely filling the pelvis, the right kidney was only a pus cavity. Other organs appeared healthy.

Male Inguinal Hernia.

H. O. Marcy in the Medical News for June 23d, says that all hernias, not inguinal, are protrusions through relatively large holes and essentially short direct canals, but inguinal hernia has a larger indirect oblique avenue of escape.

Opposite the internal ring there is normally no *processus infundibuliformis peritonei*, unless the cord be drawn down. When present this is an anatomical defect and contributes to the formation of a hernia by keeping the internal ring more or less patent. Lack of development is the great cause predisposing to hernia, because in the perfect inguinal canal the pressure from within acts laterally, just as by the oblique course of the ureters into the bladder, injury by back-set of the urine to the kidneys is prevented by the lateral compression upon the ureters by the vesical destention. The inguinal canal and the vesical ureteral implantation are the only two examples of this mechanically advantageous arrangement in man. Given the anatomic defects and any of the usual causes, slowly and gradually the viscus appears beyond the external ring and reaches the scrotal extremity. In operating he considers the following points as necessary for cure:

(1) A skin-wound large enough to expose well all the factors and to enable free separation and retraction of the cord. (2) The complete emptying and ablation of the sac. (3) The closure of the proximal end of the neck short and within the general peritoneal cavity. (4) The use of sutures for this step rather than ligature which may engage some aberrant vessel and cause gangrene and death, as proved by an autopsy cited. (5) Careful reconstruction

of the inguinal canal with reference to its normal obliquity. (6) The employment of buried continuous animal sutures, one for each of the two layers, avoiding the many knots of interrupted sutures and dangers of buried non-absorbable material. (7) The closure of the wound without drain. (8) The covering of it within an iodoform-collodion seal, and (9) no other dressing. The subcutaneous transplantation of the cord beyond the internal ring he condemns, because it substitutes a short direct hole by incision for the natural long oblique canal. The more complicated procedures of transplanting the pyramidalis and of interweaving the various structures have no advantages over the typical operation. The strong eversion of Poupart's ligament and the suturing of the conjoint tendon to its abdominal and posterior aspects are highly efficient details of the general procedure.

Sulphonol Poisoning.

Amelia Zeigler, in the Medical Sentinel for May, reports a case of poisoning from 125 grains of sulphonol. A young lady, unable to sleep, bought an unbroken box of sulphonol and took about one-fourth of it at 10:30 P. M. April 27th. She slept until 12 M. April 28th, when she was partially aroused, and acted as though she was intoxicated.

She was nauseated, dizzy, had a staggering gait, difficult speech, mind not clear, could retain nothing on her stomach. Remained in a dazed condition until 11:30 when she fell into a deep sleep lasting until 11 A. M. April 29th, when she was aroused but not awakened. Stupor and muscular relaxation much greater and gradually increased, temperature 99, pulse 90, respiration 27.

At 7 P. M. of the 29th, temperature 98, pulse 70, respiration 15.

At 9 P. M. respirations 6 to 8, breathing labored, pupils dilated and not responsive to light.

At 11 P. M. patient began to respond to treatment, and at 7:30 A. M., April 30th, she awoke as from a natural sleep, and could remember nothing since the evening of the 27th.

Urine was scanty during the entire period, about 4 ounces in the 24 hours. S. G. 1028 to 1034, no albumin and no sugar.

Microscope showed epithelium, epithelial casts, calcium oxalate, triple phosphate and blood corpuscles.

The treatment was strychnine, glonoin, brandy hypodermically, artificial respiration and nutrient enemata.

Small Pox in New Orleans.

In the New Orleans Medical and Surgical Journal for June, Quitman Kohuke discusses some recent history of small pox in New Orleans.

The first case appeared February 2d, 1899, in the person of a negro from Cincinnati, the last case was on July 24th, 1899, there being 232 cases in all. Of these, 110 were traced to sources of infection outside the city and no less than nine States contributed cases to the small pox hospital. So of the 232 cases only 122 developed in the city and only 5 out of the whole number ended in death.

The most alarming part of the epidemic was the infection of the Charity Hospital which occurred later in the year.

The number of cases from October 20th, 1899, to April 12th, 1900, was 924 with 232 deaths.

In the first epidemic the mortality rate was very low, but in the last it was very high.

And so no matter how mild the type we should use our utmost endeavors to stamp out the disease as soon as possible.

Thyroid Extract.

In the Virginia Medical Semi-Monthly for June 22d, Wm. F. Drewry and J. M. Henderson give the results of a clinical study of thyroid extract at the Central State Hospital for the Insane.

Eighty-eight cases were treated with the extract.

Six cases, or seven per cent., of the whole number treated, recovered; 9, or slightly more than 10 per cent., permanently improved; 8, or 9 per cent., improved temporarily and then relapsed; and 55, or 62 per cent., were not affected by the treatment, mentally or physically. Of the 6 cases that recovery might be attributed perhaps to the thyroid, 3 were cases of acute mania, 1 was acute melancholia, 1 agitated melancholia, and 1 chronic mania. Of the 9 cases in which permanent improvement might be attributed to the remedy, 1 was acute mania, 2 were acute melancholia, 2 chronic mania, 2 recurrent mania, 1 was recurrent melancholia, and 1 epileptic mania. Of the 8 cases in which temporary improvement occurred, 2 were acute mania, 4 chronic mania, 2 chronic melancholia, and 1 was epileptic mania.

After giving the thyroid a fair and conscientious trial, in those cases in which no improvement followed within a reasonable time, they instituted other treatment. The results up to the present time are as follows: 12 discharged recovered, 13 discharged im-

proved, 9 died, 54 remain in the hospital—4 of whom are improved, and 48 either stationary or tending to secondary or terminal dementia.

From these experiments they conclude:

1st. That it is a remedy of certainly very limited value, if any, in the treatment of any form of insanity.

2d. That those cases apparently benefited by it, owe their improvement or recovery as much, or perhaps more, to other agencies, such as better nursing and attention, rest, dieting, tonics, etc., than to the thyroid.

3d. That it is in the so-called curable cases—acute form—that improvement or recovery seems to be the result of thyroid treatment—cases that would either get well without any special medicinal treatment, or from the treatment usually followed in such cases.

4th. That ordinarily thyroid extract may be given with impunity without producing dangerous symptoms of any kind.

5th. That having tried every rational line of treatment without effect, it is perhaps well to give the thyroid treatment a trial.

Pilocarpine in Deafness.

Dr. Emery (Massachusetts Medical Journal, June), records two cases in both of which total deafness came on suddenly with nausea and vomiting. In the first case, but not in the second, there was also vertigo, and further right facial paralysis ensued. Subjective noises in the ears were present in both cases. Both aerial and osseous conduction were obliterated. The first patient had a syphilitic history, but none could be elicited in the second. Severe pain was present in both cases, in the first at the back of the head and in the second at the vertex. The author considers that in the first case the auditory centres in the cerebellum were probably the seat of syphilitic exudation, while in the second the lesion was probably labyrinthine and apoplectoid in character, most probably due to the rupture of a small vessel in each of the two labyrinths simultaneously, the attack having taken place while the man was stooping at his work. The treatment consisted, after many other measures had failed, of injections of pilocarpine under the skin of the shoulder. The injections were at first of the strength of one-twelfth of a grain and were administered daily, but as the strength was gradually raised to one-third of a grain the frequency was diminished to every second and every third day. The patient remained in the recumbent posture for some

six hours after each injection. Improvement in hearing manifested itself in each case almost immediately, and this progressed steadily. The author attributes the action of the drug to its stimulating the absorbents in the vicinity of the effusion before the latter had had time to become organized. It is obvious, therefore, that the treatment requires to be begun as early as possible, and it is probable that it would prove useful in cerebral apoplexy generally.

Puerperal Mastitis.

Bronha (Canadian Practitioner), gives details of a healthy primipara who during the last three weeks of her pregnancy carried out most conscientiously the prophylactic treatment advised by Rubeska for the prevention of mammillary abrasions and cracks; twice daily she washed the areola and the nipple with warm water and soap, and followed this with a fomentation of the parts, sometimes with alcohol and sometimes with glycerine. The labor supervened at term; the child presented by the breech, but was delivered without interference; but there was some *post-partum* hemorrhage causing considerable anemia. The same night there was some fever and a feeling of tension in the breasts. The infant was only once put to one breast. A mastitis developed, although no lesion could be discovered in the breast; recovery took place. The author finds it difficult to explain how microbes reached the gland tissue, as the infant had not been put to the breast when the first signs of mastitis appeared. He considers that some of the microbes which are normally found in the lactiferous ducts had forced their way through the epithelium and reached the lymphatics; he thinks that the mechanical and chemical means employed to prevent the occurrence of abrasions may have weakened the vitality of the epithelium, and so made easy the entrance of the microbes and perhaps also have increased the virulence of the microbes.

Eclampsia and Premature Delivery.

S. Marx, in the Medical News for June 30, discusses the indications for premature delivery, with special reference to eclampsia and the pre-eclamptic state.

The following points are clearly brought out in the paper:

(1) That the term pelvic contraction is only a relative condition; and in but a very few cases does the bony pelvis afford an absolute indication and that in cases only where neither a living nor a dead child can

be delivered by the natural passages. (2) We do not measure a pelvis by inches, centimeters or millimeters. We estimate its size and test its capacity for the reception of the head which must pass through it. (3) Small and even fair-sized fetuses have been delivered through pelvis whose diameters were far from normal and in which the possibility of major form of operating were to be anticipated; and in some major operative interference had already been in active process. (4) Women with apparently normal pelves in labors with large children very frequently give us the picture of a pelvis relatively contracted, and as such would warrant operations of a more difficult type than those in whom the pelvis shows a diminution in all its diameters. (5) We advise against the election of any form of operating months before, since the fetal head must always remain the sole doubtful element. (6) When once we fail to get the head to engage, it is proof positive that the pelvis is too small for the head, or the head too large, and when this condition obtains, the time to interfere is at hand. (7) We advocate the systematic use of the pelvimeter for purposes of comparison only. We deprecate the absolute value of the instrument as one of precision, and never pin our faith as to results which it gives in determining when or when not to induce labor when there is disproportion between maternal pelvis and the fetal head.

Tubo-Ovarian Adhesions; Their Reflexes.

Before the American Medical Association, A. L. Beahan, reported in the Medical Record, called attention to the simulation of hysteria by conditions resulting from simple inflammatory forms of adhesions between tubes and ovaries.

Differential diagnosis of this border-line disease was shown to be paralleled by insanity caused from structural changes in the appendages; the former consigning the patient to chronic invalidism, misnamed neurasthenia or hysteria, the latter excluding from society if not ostracising from home. The author emphasized the fact that tubo-ovarian adhesions occurring in the early years of a woman's life might, by reflex as well as by direct effects, give in insidious ways obscure nervous symptoms, and a great error would be made if from a lack of a discriminating diagnosis this disturbance was characterized as one in which systemic forces alone were at fault instead of local ones. It was claimed that a clean removal of both appendages cured the patient, and a nervous wreck became a healthy, happy, useful being.

Prolonged Sleep.

According to the Medical News, a unique case of prolonged sleep of seven months' duration in a girl eighteen years of age, suffering from sarcoma of the pituitary body, came under the care of F. Soca (*Gaz. hebdo. de med. et de chirurg.*, May 31, 1900). There was at first general asthenia with headache, optic atrophy, especially on the left side, with dilated pupils not reacting to light, but no ocular palsies. Soon the sleep began, from which the patient only awoke to take food. Toward the close of the disease, memory and attention were much affected while the patient was conscious; speech was incomprehensible, the reflexes were exaggerated and there was some muscular atrophy. Death resulted from bronchopneumonia. A tumor the size of a mandarin, reaching into the third ventricle, was disclosed on autopsy.

Retroflexion of the Uterus.

In discussing the operative and non-operative treatment of this condition, Weidenbaum, in *St. Petersburg Medical Woch* for March 18th, quoted in the *International Medical Magazine* for June estimates that only a small portion of women with retroflexion of uterus even consult a physician, that the greater number suffer no pain and have no knowledge of the abnormal position. Of 303 women examined by Winter, 36, or 12%, had retroflexion of uterus; of these 11 were from pain, while in the other 25 the suffering was due to some complication, such as tumor, inflammatory changes or other pelvic disease. Hence, he concludes that uncomplicated retroflexion, from adhesions, rarely causes pain, seldom interferes with pregnancy, and may be cured by reposition and retention in position for a brief period by means of a properly adjusted pessary. Any cervical laceration or defect in the perineum must be corrected before the application of a pessary.

Tuberculosis of the Knee Joint.

Wisner Townsend, according to the *Boston Medical and Surgical Journal* for June 28th, says that the treatment of this condition should be both constitutional and local.

The former is too generally neglected; it should consist in careful attention to diet, the use of creosote and general tonics, out-of-door life, and careful attention to the general health. Rest is indicated if the exercise gives no benefit. In the local treatment the joint should be protected from every slight jar. This is best ac-

complished by the use of the Thomas knee-splint with a high-soled shoe for the opposite side. Plaster of Paris or silicate of soda may be sometimes used. In any measures to overcome deformity, force should be avoided. Excision in children should not be performed if any other treatment can be substituted on account of the interference with the normal growth of the limb; in adults excision should be performed in the majority of cases. Complicating abscesses should be evacuated and sinuses dissected out or treated by stimulating injections. The limb should be given complete protection for at least two years.

Typhoid Infection without Intestinal Lesions.

A case of typhoid infection without intestinal lesions, with positive Widal reaction, is reported by W. Ophuls in the *New York Medical Journal* for May 12th.

The patient was a male, age 24, and was brought to the hospital in a semi-conscious condition, temperature 105. The temperature continued high during his stay in the hospital, reaching at one time 106.

Urine showed marked diazo reaction and the Widal test showed clumping at a dilution of 1 to 40.

He died at the end of the first week.

Post mortem showed none of the intestinal lesions characteristic of the disease.

The appendix was inflamed and the lungs and pleuræ showed pathological changes. The spleen, liver and kidney also showed evidences of disease, but no bacteria in sections. Smears from the spleen showed the colon bacilli, and many short motile rods which did not ferment grape sugar or produce indol in Dunham's peptone solution or liquefy gelatin.

They possessed many flagella and were agglutinated by the blood serum of a case of typhoid fever at a 1 to 40 dilution in three hours.

Urea and Uremia.

Urea is not found in the kidney but exists in the blood and is a result of tissue disintegration, says H. P. Coile in *Merck's Archives* for May. Further he reports a case of uremia in which the excretion of urine and urea equalled or exceeded the normal amount.

He holds that acute uremia occasionally occurs without suppression of urine or obstruction to its flow, and in the absence of structural change of the kidney.

That acute uremia may occur while the amount of urea excreted is far above the normal.

That in such cases the increased amount

of urea in the blood is first from rapid tissue disintegration, until the blood is badly poisoned, and then is probably increased by nitrogenous food eaten, which cannot be assimilated and which disintegrates in the blood.

That in the treatment of acute uremia active diaphoresis is of little value, as so small an amount of urea is obtained that it is practically unappreciable, and the blood is thus deprived of its water and salt, which is not only not harmful but of great value.

X Ray Burns.

Ten cases of X ray burns are reported by Thom. L. Butler in the American Practitioner and News for May 15th.

Two of the cases occurred in his own practice and was due to the tube being placed too near the patient.

Three reasons are given for these burns: Improper apparatus, too long exposure, and placing tube too close to patient.

From a careful study of the ten cases he concludes that proper treatment hastens recovery considerably, contrary to statement of Moullin and others. Burns of first degree are benefited by the continued application of ointments, especially having a lanolin base.

Various ointments and drying powders increase the amount and thickness of necrotic membrane in burns of third degree.

Hot, moist, mildly antiseptic dressings used early in burns of second and third degree help to limit extent of ulceration, and used late help to hasten process of repair.

Skin-grafting at the proper time is indicated, contrary to teachings of some.

Methylene Blue in Malaria

Smithwick (Merck's Archives)

1. Methylene blue is a perfect succedaneum for quinine, and may be given whenever the latter drug is indicated in the treatment of malaria of every form and under all conditions, with the same confidence that has always attended the administration of quinine.

2. Patients need not be selected on account of idiosyncrasies, as no bad effects ever follow the use of methylene blue, if given intelligently.

3. It is the remedy to use in malaria with hematuric complications, as it acts in a two-fold manner.

4. It is the remedy to be given in malaria occurring during the pregnant period, as it has no oxytotic effect and will cause a freer action of the kidneys, which is also beneficial.

Perforation in Typhoid Fever.

A study of 24 cases of typhoid fever with symptoms of peritoneal infection is given by Geo. B. Shattuck, J. Collin Warren and Farrar Cobb in the Boston Medical and Surgical Journal for June 28th.

Seventeen proved to be cases of perforation of the intestine, two showed perforative necrotic areas, one ruptured mesenteric gland, and in three cases the cause of symptoms was undetermined, the diagnosis not being confirmed.

From a careful study of these cases they conclude that complaints of abdominal pain in any typhoid case, especially if localized, and especially in cases of mild type, should be regarded as serious danger signals. We have already seen that in our sick and septic cases the condition of the patient may be such that moderate pain may not be noted, and that therefore a complaint of abdominal pain on the part of such a sick case may mean an established general peritonitis.

In many very sick typhoids perforation or peritoneal infection cannot be diagnosed until the results are already widespread and of fatal extent. The chances of a fatal issue from an abdominal operation in such cases are overwhelming.

In mild typhoids of fair general condition an abdominal operation is readily borne, provided no peritoneal infection is present.

A small number of mild typhoids may have sudden perforation with free extravasation. In these the symptoms are fulminant, but localized to a great extent, and in these operation must be done at once, for general infection may become past relief in from one to five hours, and walling off of the perforation by protecting adhesions is so rare as not to be counted upon.

In the majority of mild cases, beginning infection (whether from perforation or not) is marked by comparatively slight symptoms—local pain, tenderness, spasm and leucocytosis. The severe following symptoms mean general peritonitis.

These warning symptoms demand serious consideration and study, but in many cases are either not rightly understood or not acted upon.

Complaint of abdominal pain in a case of typhoid should always lead to a suspicion of beginning peritoneal infection.

Frequent leucocyte counts are needed in every case of typhoid. In the presence of abdominal pain an hourly count is necessary.

Pain associated with local tenderness and muscular spasm and a rising white blood count points in most cases to an operation; in all cases to a surgical consultation.

In not a few of this series of cases opera-

tion was imperative a varying number of hours before it was done.

If it can be appreciated that the severe symptoms more often mean general peritonitis, it must be understood that the milder and earlier symptoms are the important ones.

Hernia in Children.

The results of operative treatment in children are better than in adults, according to A. J. Ochsner in the Medical News for June 23d, and if the same indications can be established, he advises early operation, otherwise non-operative management, because in the majority of cases it cures absolutely.

Statistics show inguinal hernia occurs 300 times to 1 femoral in the child and the London Truss Company make the ratio 10 times greater. All large umbilical and ventral hernias in children are fatal. The chief predisposing causes are the anatomy of the formation and descent of the testes, unduly long mesentery, congenital or acquired by intestinal distention, in 25 per cent. of all cases inherited local and systemic weakness, poor nutrition and general softness and flabbiness of the muscle-tissues. The exciting factors are intra-abdominal pressure due to intestinal disturbance, flatulence, distention, constipation, urinary obstruction in phimosis, and obstinate cough or violent crying. Often the mother notices the protrusion and fearing the effects of crying feeds the baby whenever it whimpers, brings on thus indigestion, distention, constipation and, hence, really increases the lesion. Therefore, we find these conditions so often among the ignorant and poor who neglect advice. Many hernias heal before the child's sixth year, when statistics show 1 to exist in 21 patients; from that to the thirteenth year there is still more spontaneous cure, so that the ratio is 1 in 77; of these still more tend to disappear before adult life. Heredity of weaknesses through intermarriage among the Jews counterbalances the advantages of circumcision and accounts for the great frequency of hernia among them. Coley has shown that only 5 per cent. of all adult cases date their history back to infancy and childhood. The great element of the treatment is to keep the sac empty and to remove the cause, especially intestinal disorder, constipation, and phimosis. The spreading of the pelvis in growth tends to make the inguinal canal more and more oblique, to close the internal ring more completely, and to shorten the mesentery by converting some of its redundancy into parietal serosa. If the child be

put into a bed with elevated foot, all causes kept corrected and the sac empty, many cases promptly begin their recovery. Others require a truss night and day to flatten and close the canal. The operative cases should be confined solely to (1) patients over 4 years old; (2) reducible recurrent hydrocele; (3) irreducible hernia; (4) incarcerated hernia; (5) strangulated hernia. The technic should stop with the ablation of the sac and closing of the peritoneum and internal ring. Repair of the canal is to endanger the health of the testis by doing too much; therefore, as a rule, the restoration of this part had best be left to Nature in children.

The Blood Pressure in Sleeplessness and Sleep.

Dr. Lewis C. Bruce, read before a recent meeting of the Edinburgh Medical Society some observations made on the inmates of Murthy Asylum on the general blood pressure in sleeplessness and sleep. (New York Medical Journal July 7 1900.) The instrument used was Barnard and Hill's sphygmometer, and Hill's statement that "the normal general arterial pressure in the horizontal posture equals about a hundred and ten millimetres of mercury" was assumed to be correct. The first points investigated were: 1. Are there any unusual conditions of blood pressure which are associated with sleeplessness in mental disease? 2. What changes occur in the blood pressure when sleep is induced in these cases by drugs? The cases ranged themselves under two classes: 1. Sleeplessness with high blood pressure (anything above a hundred and thirty millimetres of mercury). 2. Sleeplessness with low blood pressure (anything below a hundred and ten millimetres of mercury). The drugs used to induce sleep in these patients were paraldehyde, sulphonal, trional, and potassium bromide. In 1, paraldehyde in large doses (two drachms) was found to be the most certain sleep producer. Sulphonal came next, followed by trional; potassium bromide was unsatisfactory. When sleep was induced by any of these drugs, the blood pressures always fell to a hundred and ten or below a hundred and ten millimetres of mercury during sleep. In 2, paraldehyde in large doses of two drachms acted as a brain excitant, tended to raise the blood pressure, and satisfactory sleep was never obtained. After small doses, however—from fifteen to thirty minims—these same patients slept well. In this class trional in twenty-grain doses and then sulphonal were the most satisfactory drugs.

Experiments were then made with erythrol tetranitrate in doses of one grain daily in cases suffering from sleeplessness with high blood pressure, the object being to induce sleep by artificially lowering the blood pressure. Out of nine cases, three were immediately and permanently benefitted, three were temporarily relieved, and in the remaining three cases the drug had no effect even in doses of two grains daily. A second series of observations was made upon convalescent patients in order to throw light upon the following questions: 1. Is sleep possible with blood pressures of a hundred and thirty millimetres of mercury or higher? 2. What relation does the morning blood pressure bear to the evening pressure when a person is sleeping well? 3. Are there any differences in the blood pressure of the same person asleep under the action of drugs and sleeping naturally? The results were as follows: 1. Sleep is possible with high blood pressure but the pressure always falls to a 110, or about a hundred and ten, millimetres of mercury after the condition of sleep is established. 2. The general blood pressure is, as a rule, higher in the morning than in the evening in a state of health, and the reverse of this holds good in some cases of sleeplessness. 3. In the drug sleep induced by paraldehyde the blood pressure falls at its lowest, about ten millimetres of mercury below the habitual blood pressure of the same person when sleeping naturally. As the effect of the drug passes off the blood pressure rises again, and eventually passes to the blood pressure habitual to that person in natural sleep; in short, drug sleep does pass in some cases into natural sleep.

The Effects and Dangers of Chloretone.

Dr. Rudoff, in a recent edition of the Canadian Practitioner, summarizes the results of his investigations as follows:

1. Chloretone would seem, as has been found by Houghton and Aldrich, to be an ideal general anesthetic for physiological work. There might be some doubt about the recovery of the animals, however, and this would limit its use to cases in which recovery is not desired. The preliminary administration of chloroform or ether might be used here, but this increases the risk, of course.

2. It has little or no effect upon the pulse, respiration, and blood pressure for hours, but eventually, if the dose is large enough, these become depressed and the animal dies, the heart stopping before the respiration.

3. Chloretone has a most marked and

profoundly depressing effect upon the body temperature, lowering this more than any other drug with which we are acquainted, with the possible exception of alcohol. This depressing effect is evident before the animal is even drowsy, and is in ratio to the dose given. It may be partially prevented by keeping the animal very warm.

4. Any drug which can exert such an effect on the total heat of the body is one which requires to be used with great caution in medical practice. This is doubly important as the drug is very slowly got rid of, and we know of no antidote, with the exception, perhaps, of external warmth.

Wire Suture in Operating for Hernia.

The longitudinal wire suture in the radical operation for hernia is advocated by M. L. Harris in the Western Medical Review for May 5th.

This suture is introduced in the following manner:

No. 22 or 23 silver wire is threaded directly to a curved, round, non-cutting needle. This enters the skin about 1 to 2 cms. from the inner angle of the incision and passes obliquely down to the inner edge of Poupart's ligament. The needle takes a grasp of this structure not to exceed 1 cm. in length in a longitudinal direction, but so as to cross some of its fibres.

A similar grasp is now taken of the conjoined tendon, then of the inner edge of Poupart's again, thus alternating from side to side, constantly in an advancing direction until the entire length of the desired approximation is traversed. The needle is then made to penetrate the external oblique and skin appearing on the surface 1 to 2 cms. from the outer angle of the incision.

This is not an over and over stitch, but the wire when drawn taut is perfectly straight. The point of insertion of the needle on one side is opposite to, or but very slightly in advance of, the point of exit on the other side. Each grasp of the needle should be about 1 cm. in length and care should be taken that no kinks occur in the wire.

When there is considerable space external to the cord produced by the early divergence of the muscles from the ligament, it is advisable to take one or more grasps of the suture external to the cord. Only sufficient opening should be left to permit the passage of the cord without obstructing its circulation. After the first wire has been introduced, the cord, which has been held to one side, is now restored to its normal position; a second wire, taking in the edges of the divided external oblique, passes from

without inwards, closing this aponeurosis over the cord, leaving but sufficient opening at the inner angle for the cord to pass into the serotum.

The cutaneous edges are now closed by a third subcuticular wire and the operation is finished.

They are left in for two or three weeks and then removed.

The Treatment of Atonic Ulcer with Hot Water.

Kindler, in the New York Medical Journal, gives his experience of years in the Moabite Hospital of Berlin in the treatment of chronic atonic ulcers of the legs, finger ulceration in syringomyelitis, syphilitic ulcers of tertiary variety, phagedenic chancres, etc., with the use merely of hot water applied with an irrigator. His method consists in using two quarts of water as hot as can be borne for from one to three times daily from an elevation of six to seven feet. He says that no plan of treatment has given him such excellent results, and it has brought about healing in a much shorter time than by any other method.

The *modus operandi*, he says, is first the increasing of textural activity and thus the bringing about of a tonic effect of the tissues; secondly, the stimulation of the terminal filaments of the nerve supply and thus, by a reflex action, the production of increased activity of the trophic nerves.

The Third Element in the Equation between Pelvic and Abdominal Disease in Women and Disturbance in the Nervous System.

H. A. Tomlinson read a paper on this subject before the American Medical Association. As reported in the Medical Record he said that menstrual disorders and pelvic diseases were quite commonly associated with the different neuroses and psychoses, but in his experience they bore no apparent causal relation to the nervous disturbance, nor was the intensity of the nervous disturbance in proportion to the gravity of the physical disease; but, on the contrary, the most grave pelvic disease, even among the neurotic and insane, existed without disturbance in the nervous system and frequently without physical symptoms. In cases in which the insanity or chronic nervous disease had existed for more than a year, or the patient had a defective nervous organization, it was stated that treatment of the disease of the generative organs was practically without effect upon the insanity

or neurosis, and in such cases operative interference resulting in the establishment of an artificial menopause almost invariably hastened the onset of the dementia. Operative interference the author believed was called for in the treatment of pelvic disease among the insane for the same reasons that would determine the necessity for such treatment among the sane; i. e., the reasons were purely surgical. In order to know the probable curative effect on insanity of treatment of diseased generative organs, it was considered important to know the family and personal history of the patient with regard to the presence or absence of evidence of unstable or defective nervous organization, the length of time the condition had existed, and to what extent the general health of the woman was affected by the pelvic disease independently of the insanity or nervous disease.

Treatment of Uterine Fibroids.

M. S. Duplay (New York Medical Journal) discussing this subject, says the conservative methods of treatment are threefold. The first is by the daily hypodermic injection for several months of ten drops of the following solution:

R	Ergotine,	30 grains.
	Chloral hydrate,	15 "
	Water,	6 ounces.

This is Simpson's formula, and its use is sometimes followed by an atrophy or disappearance of the tumor. Electricity the author does not recommend, as being uncertain and sometimes dangerous. Treatment by mineral baths may be palliative, but is not curative. The complications which demand operation are hemorrhages, pain, signs of compression, septic symptoms, and torsion of the pedicle of a pedunculated fibroid. Rapidly growing fibroids in young women should also be removed. Myomectomy, when feasible, is a valuable operation, since it preserves the uterus.

The Cause of Scurvy.

According to Chicago Clinic for June, H. J. Jackson and Vaughn Harley (Lancet, April 28,) says that the accepted theory that scurvy is due to the deprivation of fresh vegetables needs modification. They cite several instances in the experience of Arctic travelers in which scurvy has occurred when canned meats were used, in spite of the fact that lime juice was freely used. In other cases, where the parties subsisted on fresh meat, but had neither vegetables nor lime juice, they escaped scurvy. Their escape could not be

attributed to their favorable hygienic surroundings, because these were in many cases the worst possible. These observations point to the conclusion that scurvy is a form of ptomaine poisoning, the ptomaines being derived from tainted meat. To test this theory, they arranged a series of experiment upon monkeys. The monkeys were divided into three sets. One set received, mixed with their food, which contained no fresh vegetables, meat from a fresh opened can. To the second set, meat which had been tainted by exposure to the air of the laboratory, was given. The third set received the same as the second, with the addition of an apple or a banana.

The monkeys of group one showed no signs of scurvy, but lost weight and died, after some months, of diarrhea, which in most cases did not begin until a few days before death. At the autopsy no anatomical cause of death could be found.

Group two developed scurvy, as shown by bloody stools, and in most cases spongy and ulcerated gums. They also showed great weakness and disinclination to exertion. The diarrhea in these cases set in much earlier than in group one, sometimes beginning in three or four days after the beginning of the experiment.

Group three also developed scurvy, in spite of the vegetables in their food.

The blood in monkeys affected with scurvy shows a condition of anemia resembling chlorosis.

The experiments of the authors seem to show that tainted food will cause the development of scurvy, even in cases where fresh vegetables form a part of the food.

Treatment of Acquired Hydrocephalus.

Grosz, in the *Archiv. fur Kinderh.*, xxvii, Nos. 3 and 4, cited by treatment for June, records the case of a child of ten months who developed signs of internal hydrocephalus six weeks after symptoms of meningitis. The head was enlarged, and the child was unable to support it; there was amaurosis; the pupils no longer reacted, and there was a downward and inward squint.

Dr. Grosz punctured the right lateral ventricle through the anterior fontanelle, which was still widely open. He withdrew by aspirations 40 c.c. of fluid, and arranged a supporting dressing, with decided improvement to the condition of the patient.

During the succeeding days there was some recurrence of the symptoms, and, encouraged by his previous experience, Dr.

Grosz punctured the left lateral ventricle in a similar manner, and withdrew by aspiration 70 c.c. of fluid. From this time the improvement in the patient was permanent; the head could be held up; vision returned, with mobility of the pupils; the strabismus disappeared, and a satisfactory state of health was recovered.

In a similar case a parallel line of treatment may well be recommended.

Calomel as a Diuretic in Cardiac Affections

According to Treatment for June, in his thesis (Paris, 1899) Bourgeon urges the claims of calomel as a useful diuretic in the subjects of heart disease. In spite of long acquaintance with this agent in this connection, its use has not yet become general. This may perhaps be due to the irregularity of its action, which is sometimes as remarkably favorable as at others it is strikingly ineffective, without any reason being discernible for this difference. M. Bourgeon in his thesis undertakes the study of this matter, and shows that in this application we possess in calomel a therapeutic agent which we cannot afford to neglect.

The first point demonstrated is that calomel is capable of promoting diuresis in cardiac affections, apart from the existence of dropsy; but it does not so act when there is diarrhea, which with the supervention of albuminuria are the chief contra-indications to its use.

The quantity of calomel necessary to obtain diuretic effects varies from 3 to 6 grains daily, which may be administered in a little milk in divided doses at intervals of from three to five hours.

There is apparently no advantage in giving larger doses. The function of the kidneys should be carefully watched, and the appearance of albumin taken as a sign for discontinuing the drug.

It is hardly possible to say in advance if calomel will exert this diuretic action; but, on the other hand, it often succeeds where other diuretics fail.

When after three or four days the increase in urine is not maintained, it is better to discontinue the use of calomel, which might then become a real source of danger. The place of calomel as a diuretic is somewhat of a last resource when others fail, and in this it is often unexpectedly efficient.

The Increase of Cancer.

According to Modern Medicine for June, the increase of cancer, to which medical writers are frequently calling attention nowadays, is one of the grave indications of radical degeneration and the extension

of one of the most deadly of all maladies. The London Lancet, speaking on the subject, states as follows:

"Perfectly accurate figures show that the registered mortality from malignant disease in England and Wales has at least doubled within the last fifty years. Among males, indeed, there has been an uninterrupted increase from 19.5 per million of the male population to 57.1 per million in the later years of the last century."

The above figures present the most unequivocal evidence that cancer is rapidly increasing. According to the figures given, cancer occurs at the present time more than twenty-eight times more frequently within the last few years of the present century. This fact certainly presents food for thought as to the probable reason for this enormous growth of this deadly disease. There can be little doubt that the use of flesh food, and other influences to which may be traced a deterioration of the constitution, are the essential causes.

Atropine in Intestinal Obstruction.

Atropine in massive doses in cases of intestinal obstruction where for one reason or another early surgical interference defers to an expectant plan of treatment is recommended by Dr. Batsch, in *Bul. Gen. de Therap.* May 8, *Merck's Archives* June.

In these cases he advises recourse to subcutaneous injections of atropine exceeding more or less the doses usually given. While belladonna has been frequently employed in intestinal occlusion, atropine is not generally mentioned among the remedies used for this condition. Dr. Batsch, however, and many of his confreres who have followed his example—notably Drs. Gebser and Festner, of Riesa, and Dr. Scheumann, of Grossenhain—have obtained very good results by means of the hypodermic use of atropine in doses varying from 1-60 to 1-12 of a grain, according to the strength, constitution, and age of the patient. In some instances a single injection is sufficient to effect a resolution. In others the first dose only produces a passage of gas and a small quantity of fecal matter, a second injection on the following day being necessary to complete the cure.

Sickness and Nausea.

Dillon J. Spotswood, writing in the *Public Health Journal*, February, on the treatment of yellow fever, gives some hints which may be of use in dealing with sickness and nausea in other complaints (Treatment for June). He had found cocaine hydrochlorate in 1-4 grain tablets dropped on the

tongue and swallowed rapidly will relieve the most intense nausea. Given in solution, it is absorbed by the mucous membranes before reaching the stomach. A small ice-bag or an ice-cold towel placed low down on the throat, and the face sponged with Cologne water, will greatly assist the cocaine. Three grains of bismuth subnitrate and 1-10 grain of calomel, given with 5 grains of sugar of milk and 1-10 drop of peppermint every hour or two will sometimes relieve the patient. The old remedy of burning the epigastrium thoroughly with a mustard-plaster should never be neglected. Finally, when all have failed, morphine and atropine, hypodermically, may be cautiously used. The phosphate of codeine should be tried first.

Hemorrhage in Tubal Pregnancy.

M. Doleris, in *Chicago Clinic* for June, says that tubal pregnancy located about the middle of the tube, or in the internal half of the tube, is frequently associated with serious hemorrhage during the early months of gestation. In tubal pregnancies located external to this, serious hemorrhages only uncommonly occur before the fourth or fifth months. Hemorrhages occurring previous to this epoch are either more moderate or slower, hence it is important to determine the exact location of the ovum. When the ovum is located near the uterus its presence there can be determined by bimanual palpation as well as by vaginal palpation. Furthermore, the tumor is usually preuterine. When the ovum is located in the external half of the tube the tumor can usually be found in the cul-de-sac of Douglas. Clinically, expectancy should not be followed in ectopic gestation located in the internal half of the tube. It is important in ectopic gestation to have exact knowledge as to when the menstrual flow should occur. Accidents most commonly occur during this period. In intervening surgically we shall attempt to precede this period.

Amputation of the Penis.

H. G. Lucas (*Centralblatt f. Chirurgie*, No. 1, 1900, *St. Louis Courier of Med.* April), divides the urethra and corpora cavernosa in such a manner that the former projects three or four centimeters beyond the latter. The exposed ends of the corpora cavernosa are covered by uniting the divided tunica albuginea over them, then the edge of the skin wound is sutured to the side of the urethra and at a distance of 2 cm. from its extremity. In no case so treated has stricture at the urethral outlet occurred.

Desquamation in Typhoid Fever in the Adult.

Paul Remlinger, in *Revue de Médical May*, New York Medical Journal June 16. Although desquamation is not uncommon as the result of typhoid fever in children, the author has been unable to find in literature any mention of its occurrence in the adult, unless Rolleston's and Clapham's patients, mentioned at a meeting of the Clinical Society of London held on January 10, 1890, without their ages being stated, were adults. Yet, among 706 cases of the disease treated in a military hospital during the years 1898 and 1899 desquamation was observed in six instances. They were all grave cases, the fever being prolonged from thirty-two to fifty-two days, and in all of them the desquamation was first noticed when the temperature began to fall, a fact which might appear to lend color to the view that in children the peeling is due to sudamina, but the author thinks it is of trophic origin. In his cases it was intermediate in character between that of the measles and that of scarlet fever. It began on the sides of the chest and abdomen and remained most prominent in those situations. In all but one case it was limited to the trunk; in three there was concomitant falling of the hair.

Treatment of Endometritis Occurring in Nulliparæ.

In young nulliparæ (Bouilly, *Journal de Med. de Paris*, Chicago Clinic for May), we have no lacerations, we have no sclerotic changes; the external orifice is small. The body of the cervix is dilated. Its secretion is vicious, adherent, reddish yellow. We have retention of secretion. The cervical cavity resembles a small barrel. Women that are subject to these tenacious, vicious, adherent discharges are usually sterile. They have lesions of the glandular cul-de-sac of the uterine cervical glands. These patients do not suffer much. They have a sensation of weight in the pelvis. Is the affection gonorrheal? Curettement fails. Antiseptic injections do absolutely no good. Tampons saturated with alum or tannic acid have no effect. Topical applications do not often succeed. The glandular lesions are so deep that cervical antiseptics is fruitless. Schræder's amputation of the cervix is a complicated operation. It demands multiple sutures; in fact, it is a major operation for a minor lesion. We shall perform the following operation: Dilatation of the uterus for two days, then lavage and curettement of the

uterine cavity. Seize the anterior and posterior lips of the cervix; with a narrow and small scalpel remove a mucous flap of 2, 3 or four millimeters in thickness from each lip. The commissures are to be spared. Thus mucous membrane is removed from two opposing surfaces that do not come in contact with each other. The mucosa of the lateral portion of the cervix regenerates the mucous membranes for the entire external os. The external os after this stays widely open; so as to avoid, possible post-operative hemorrhage the cervical will be tamponed with iodoform gauze.

The Digestive Power of the Stomach.

Bauer and Deutsch (*Jahrb. f. Kinderhkde.*, St. Louis Courier of Med. April), report the results of a series of investigations which was undertaken to determine the strength of the gastric digestion in infants. The stomach having been carefully washed, food was given and the contents withdrawn after a certain interval and examined. It was found that in healthy infants an excess of lactic acid exists at the beginning of digestion. Hydrochloric acid was found toward the end of digestion. In gastro-intestinal affections, free hydrochloric was not found, but lactic acid, butyric acid, and even acetic acid existed in notable quantities. The same changes are found in fevers. Motor insufficiency is found in all fevers and gastro intestinal derangements.

The Diazo Reaction in Phthisis.

The Western Medical Review for June gives an abstract of a recent article on the diagnostic and prognostic value of Ehrlich's diazo-reaction, taken from an article by M. Michaelis in the *Berliner klinische Wochenschrift*, which presents some interesting conclusions. All diseases are divided into four groups with reference to their susceptibility to the diazo test: (1) Those in which the diazo-reaction never occurs; (2) those in which it usually occurs; (3) those in which it only rarely occurs; and (4) all the tuberculous processes. Here the diazo-reaction is of special importance both as to diagnosis and prognosis. When in patients without temperature we get continuous diazo-reactions tuberculosis is almost certain. Tubercular peritonitis is thus readily distinguished from ascites due to cirrhosis, though occasionally peritoneal carcinoma responds to the test. Tubercular meningitis, pericarditis and pleurisy are also to be distinguished by this means. Pulmonary tuberculosis is, however, the principal object of research. Un-

disguised positive reactions in these cases are to be considered fatal as to prognosis. The original Ehrlich reagent was the one used. Ingestion of certain drugs such as naphthalin, chysarobin, gallic acid, tannigen and tannalbin seems to prevent the reaction from taking place. The test seems to be positive independently of the fever, of the number of tubercle bacilli, or the quantity of sputum. It is also positive in mild cases of tuberculosis, and when acute infections set in which alone would give negative results. From 167 cases of phthisis he draws the following results:

Negative reaction—Cured, 5; improved, 44; unimproved, 5; died, 3.

Positive reaction—Improved, 15; unimproved, 16; died, 80.

Clement has also shown that out of one hundred of his cases of phthisis with fatal terminations, 87 gave continuous positive reaction.

Suprarenal Gland.

Louis S. Somers in Merck's Archives for June gives the result of a clinical and experimental study of the local use of the aqueous extract of the suprarenal gland.

His conclusions are that:

The aqueous extract of the suprarenal gland is the most powerful astringent and vaso-motor constrictor that we possess.

Its action is peripheral, is exerted directly on the vessel walls and basement membrane, and is limited only to the parts with which the drugs comes in contact.

Is non-toxic, non-irritating, cannot produce a vicious habit, and may be repeatedly used on the same individual without losing its power.

It prevents to a marked extent, the toxic effects of local anesthetics by retaining them in the tissues and preventing absorption.

The aqueous extract readily decomposes on account of the large amount of animal matter present, but the degree of putrefaction in no way impairs the physiological activity.

It first blanches and then contracts mucous tissues, and will subdue active or passive inflammation.

Its activity is not impaired by boiling and it may be repeatedly sterilized in this manner, while carbolic acid will preserve the solutions indefinitely and in no way impair their value.

It will prevent primary, and greatly lessen danger of secondary, hemorrhage.

Its action is manifested in twenty seconds, attains its maximum in five minutes,

and lasts from one and one-half to twenty-four hours.

It increases the tonicity of the parts, augments the action of other drugs, especially cocaine, and diminishes post-operative swelling.

Markedly restricts exuberant granulation tissue wherever situated.

Finally, diminishes secretion and aids in more rapid healing.

Rickets in the Tula District of Russia.

Pediatrics for July 1st quotes from a paper by I. K. Stjelbitsky, in Dietskaya Meditsina for February:

This article gives a series of statistics concerning the frequency of rickets in that part of Russia. The author bases his figures upon the examination of 2,000 children in that locality; of these 1,000 were dispensary patients, 874 children of peasants in the districts, and 126 children seen in private practice. Among the peasants the frequency of rickets was 77.5 per cent., among the dispensary cases 83.8 per cent., and among the private patients only 60.3 per cent. The ages of these children ranged from 3 months to 2 years. In a detailed analysis of the cases we note that the author did not find that damp dwellings influence the occurrence of rickets to any appreciable extent. The author further shows that there is no close relation between syphilis and rickets, as some French observers would have us believe. He found also that the material conditions of life of the families investigated did not affect the percentage of rickets. Gastrointestinal derangements, without doubt, play the principal role in the causation of the disease.

In conclusion the writer considers in detail the frequency of each symptom, and of each deformity in the 2,000 cases rendered.

Primary Infectious Endocarditis.

Gl' Incurabili for February 18, contains a paper on this subject, by Amleto Nacciarone, quoted in Treatment for June. Reference is made to numerous cases in which malignant endocarditis has been present, which has been attributed to the action of various micro-organisms. In these cases the endocarditis has been secondary to other severe lesions, such as empyema, pericarditis, meningitis, etc. The author, having perused the literature of the subject, has not been able to establish the occurrence of a primary endocarditis from the presence of the diplococcus in the endocardium. The cases which the author quotes differ in this respect from those recorded in the literature of the subject, inasmuch as in both

there was reason to believe that diplococci in an active condition were met with in the cardia cavities, and there only. It would seem that the endocardium in these cases offered that *locus minoris resistentiæ* which is necessary in order that the micro-organisms may develop and work their will, as it were on the affected organism. At all events, as Dr. Nacciarone remarks, it is pleasant to be able in this way to still further restrict the number of those cases of little understood disease which are popularly supposed to be due to the evil effects of "cold."

Seasickness.

According to M. Dutremblay, in the *Lancet* as cited by Merck's Archives for June, seasickness is best treated by inhalations of pure oxygen under pressure.

His experiments were made on a number of passengers on vessels of the Compagnie Générale Transatlantique, Dr. Perdriolot of the service assisting. A great many trials demonstrated the effectiveness of this treatment. Rapid relief was obtained, the nausea and sickness disappeared, and quiet, refreshing sleep followed. From 30 to 40 liters of the gas should be administered through the mouth, the nostrils being kept tightly closed. Inspirations should be deep and regular. The dose may be repeated if necessary.

Reflex Neurosis From Phimosis.

Edie (Philadelphia Medical Journal, March 24, St. Louis Courier of Med. April,) cites five cases relieved of various disturbances by removal of elongated and tight prepuces. In two of the cases reported the patients were adults 27 and 42 years of age respectively, with marked symptoms of insanity in each. After circumcision the patients were relieved of all abnormal and irrational symptoms.

The Leading Editorials of the Month.

How Far is the Surgeon Justified in Operating on Hopeless Cancer Cases?

The International Journal of Surgery says that some of the saddest cases the surgeon is called to see are those in which cancerous disease has made such headway that no operation can offer even a reasonable hope of cure. The ideal surgery of cancer consists in early interference, with thorough removal of all tissues either infected or forming a possible nidus for further development of neoplastic growth. It cer-

tainly is often an injustice to the patient to propose an operation that is not decidedly likely to at least prolong life for a reasonable period of time, and yet it is not always proper to refuse all surgical interference, merely for the purpose of gathering favorable statistics. If an operation is able to relieve, even for a time only, the mental anguish and the physical suffering of such patients, it should be undertaken; not, however, without warning the friends and relatives, if not the patient himself, of the temporary nature of the improvement that is expected to follow. It is especially in the forms of carcinoma attended with much ulceration, sloughing and hemorrhage, that the surgeon is distinctly bound to interfere. Ligation of the lingual arteries in the digastric triangles, with removal by the galvanocautic wire, of a stinking, sloughing, bleeding tongue, is a humane procedure that is apt to give the doomed patient many days of surcease from his pain. Thorough curetting of a cancerous uterus that has gone beyond the limits of hysterectomy, followed by cauterization with the Paquelin, or with chromic acid, and later by treatment with formaldehyde, or some other strong disinfectant, will often bring relief, that is none the less welcome because it is but temporary. In all such conditions surgery is certainly capable of lessening suffering and of giving the patients a little of that hope, which, although it is based on delusive grounds, so seldom utterly forsakes them. In visceral cancers, as in carcinoma of the pylorus, the disease often kills, more by mechanical effects than by distinct pathological alterations, and various forms of gastro-intestinal anastomosis are justified in some instances in which removal of the affected tissues is impossible. Since latter-day surgery has shown that the stomach is not indispensable for the maintenance of life, it is a question whether the establishment of duodenal or jejunal fistulæ, through which patients might be fed, is not indicated in some of these cases.

The Medical Missionary.

The New York Medical Journal says that the Ecumenical Conference on Foreign Missions which has roused a great deal of popular interest in the sessions it has been holding in New York did a most praiseworthy and judicious thing when it decided to devote considerable time to medical missionary work. We fear it must be confessed that the importance of such work is more thoroughly appreciated by the clerical missionaries, if not, indeed, by ecclesiastics in general, than it is by mem-

bers of the medical profession as a body. Many of the missionary clergy recognize that their wards' physical needs come quite as distinctly within their sphere of ministrations as their spiritual instruction does, and they freely admit that every missionary ought to have some medical knowledge. One gentleman who spoke is reported to have declared that a missionary "must always be ready to undertake the cure of any disease brought to his attention." We shall assume that he said, or meant to say, *cure* instead of *cure*—the types do play such pranks with public utterances—for we conceive that the pretense of power to cure all diseases might easily prejudice the cause among the heathen, many of whom are capable of reasoning quite astutely; but surely every missionary should be capable of alleviating physical suffering, if nothing more.

We wonder that physicians have heretofore shown so little interest in the work of the medical missionary, and our wonder grows when we reflect that the medical missionaries have not been mere plodders in relieving individual cases of disease, but have striven to keep up with the advance of medicine and have even themselves contributed to it in no mean measure. We have often had occasion to reproduce material published in the *China Medical Missionary Journal*, for example, and we never look over an issue of it without finding something that entitles it to a place in medical libraries as well as in evangelical esteem. Moreover, there are eminent medical men engaged in missionary medical schools, and in the mission work itself there is many a man who would have been sure to achieve distinction in medicine had he stayed at home. But we hope this conference will be found to have enlisted in behalf of the medical missionaries the earnest cooperation of the great body of his professional brethren, and we are encouraged in this hope by the fact that the president of the New York Academy of Medicine and one of its ex-presidents were among those who took part in the proceedings of the conference. Other eminent physicians, too, both Americans and foreign, have taken a prominent part in the good work, and we feel sure it will have its effect.

The Neurone Concept.

The Medical News says that the nerve cells and nerve-fibers were the terms employed in the description of the structural element of the nervous system up to within comparatively recent years, but, more

particularly, Italian, Spanish and German workers, have brought into general line the structure of the nervous system and have extended the biologic cell doctrine to this involved maze of elements. Apart from the many collateral and intricate questions of detail the neurone doctrine simply posits the cellular character of the nerve-unit. In the recent discussion of the neurone doctrine, held before the American Neurological Association, L. F. Baker outlined very clearly the biologic import of the doctrine and showed that, notwithstanding the many irregularities in technic and the manifest differences of interpretation of such technical modes of investigation, the neurone doctrine is fundamental and has come to stay, for some time at least.

Whether, as claimed by recent observers, the neurones are in actual physical contiguity or not, is an irrelevant question, if the fundamental biologic idea is kept in mind. Some contact of the individual units must exist, physiologically at least, and the question of their communication by fibrils, as apparently demonstrated by Apathy, has little bearing on the general concept.

The pathological data were very ably presented by Dr. W. G. Spiller and seemed to demonstrate, notwithstanding many anomalies, the general truth of the doctrine.

As outlined by Dr. B. Sachs, the doctrine has not helped very materially in the treatment of nervous affections. This, however, is not the fault of the doctrine, nor does it militate in any way against its foundation in fact, but serves to bring out the extreme difficulties to be overcome in the treatment of so highly complex a tissue as that of the nervous system. The doctrine certainly may point out useful lines of treatment as its details are more thoroughly mastered.

A Dangerous Weapon.

In days gone by everyone carried a sword; now everyone carries an umbrella, which recent experience shows to be almost as dangerous an instrument according to Hospital. During recent years its construction has been so altered that the harmless gamp, with which at the worst one could but thrash a man, has been turned into a rapier-like instrument, with which it is by no means difficult to run him through, and thus in moments of excitement people find themselves in the possession of a "skewer," the potentialities of which they are hardly aware of. With the object no doubt of giving a slim and

dandified appearance, many umbrellas are now made with steel "sticks," and so fine are some of these that the point is very little thicker than the blade of a foil, and is capable of doing quite as much injury if plunged into a antagonist; and this ever without the employment of much force, if the proper spot should happen to be entered. Last Saturday a charge of manslaughter was tried at the Central Criminal Court which shows well what may be done with a steel umbrella. As the sequel of a very ordinary quarrel in a public-house, the deceased followed the accused into a room and went up to him, when, as was alleged, the latter thrust an umbrella towards his face. The point entered his cheek, he became unconscious, was taken home in a cab, and died four days afterwards. At the *post-mortem* examination four and a half inches of the umbrella-stich, which was of iron, were found embedded in his skull, one inch of its length having entered his brain. This piece of iron was stated to have become so firmly fixed that the medical men who performed the *post-mortem* examination had to use a chisel to remove it. The prisoner was acquitted, the jury apparently accepting the statement made by him to the effect that the deceased rushed upon the point of the umbrella, and that the fatal result was accidental. This, however, all the more emphasises what we say about the dangerous character of the modern umbrella with its rapier-like point. If an ordinary fray, without malice or premeditation, it is possible to bury an umbrella point upwards of four inches deep in a man's head, it is obvious enough that, in the hands of those who are skilled in fence, steel umbrellas must be almost as dangerous as the sword which our grandfathers used to whip out on the smallest provocation, much to each other's detriment.

Aural Manifestations of Leukæmia.

The Medical Record says that deafness is not an uncommon symptom of leukæmia. It may appear early and has been attributed to hemorrhage. Nausea and vomiting also may occur early. Vertigo and headache are sometimes present, and syncopal attacks may occur. An interesting case in which symptoms of acute Ménière's disease, or aural vertigo, were observed in a patient suffering from spleno-medullary leukæmia was reported by Weber at a recent meeting of the Royal Medical and Chirurgical Society. The patient was a man thirty-one years old, with advanced leukæmia and a history of a malarial fever six years previously, who presented great

enlargement of the spleen and the liver. Death resulted from collapse following internal hemorrhage. During life ophthalmoscopic examination disclosed the presence of so-called leukæmic retinitis. About six months before death acute aural symptoms set in, namely, headache, vertigo, and vomiting. Examination indicated a leukæmic affection of the internal ears, and marked deafness developed within a short time. On post-mortem examination a portion of the scala tympani and the perilymphatic spaces of the semicircular canals were found filled with newly formed fibroid and bony tissue. The scala vestibuli, the canal of the cochlea, and the vestibule presented only comparatively slight changes. The nerve trunks exhibited no obvious alteration.

A study of similar cases reported indicates that the pathological appearances presented by the internal ear after death differ in different cases, partly in accordance with the length of time that has elapsed between the onset of the acute aural symptoms and death. In the most cases the post-mortem appearances suggested that the onset of aural symptoms (vertigo, headache, vomiting and deafness) marked the occurrence of more or less extensive extravasation of blood into the semicircular canals and the cochlea, the process being doubtless nearly always more or less symmetrical and simultaneous in the two ears. In such cases, although apparently lymphocytic infiltration and hemorrhages may be found in various parts of the ear after death, the labyrinthine hemorrhage is probably the essential lesion responsible for the acute aural phenomena. Subsequently, vascularization and organization proceed in the usual manner, the clot becoming gradually replaced by newly formed connective tissue, connected closely by its blood-vessels with the endosteum of the bony labyrinth. In the course of time, should the patient live long enough, more or less ossification occurs in the newly formed tissue, and irregular processes of bone project inward from the walls of the bony labyrinth. At this stage of the pathological process transverse sections of the bony semicircular canals generally show the membranous canals surrounded by a meshwork, or by irregular masses of newly formed bone and fibroid tissue completely filling up the perilymphatic space.

In addition to the cases presenting acute apoplectiform aural vertigo there occur also cases with aural troubles of a less severe or less sudden nature. In these the symptoms may be in part wholly independent of the leukæmia, but in part due to small hemor-

rhages and patches of lymphocytic (leukæmic) infiltration in various parts of the auditory apparatus.

At the same meeting Mott related a somewhat similar case. A man thirty-eight years old, who had been in poor health for two years following an attack of influenza, was seized six months before coming under observation with sudden pain in the left side of the abdomen, and a little later with pain in the head and deafness, with loss of power of maintaining equilibrium. The deafness came on suddenly, first in the left then in the right ear. The patient was a little cyanosed, the temperature 97 deg. F., the abdomen distended, the liver, spleen, and lymphatic glands enlarged. The hæmoglobin estimation was fifty-four per cent., and the leucocytes were enormously increased, almost equalling the red corpuscles in number. The muscular powers of the patient were good, and there was no loss of co-ordination in the arm, but he could not balance himself in walking, and could not stand at all with his eyes shut. The knee jerks were absent on both sides. Vision was imperfect; accommodation was good, but the reflex action of the right pupil was sluggish. The fundi showed slight changes. Hearing improved considerably. Taste and smell were normal. After seven days the man was found to be stone-deaf in both ears on waking in the morning, and three days later he died in coma. Upon post-mortem examination the liver was found to weigh 5.5 kgm. and the spleen 1.8 kgm. The brain was congested and the seat of hemorrhages. The petrous bone was soft and fraile from rarefaction. The spinal cord and nerves exhibited no alteration. There was hemorrhage into the posterior spinal roots and into the cochlea. The hemorrhage into the semicircular canal accounted for the loss of equilibrium. This and the deafness were accounted for by hemorrhage into the cochlea and labyrinth.

"Death in the Pot."

Such was the title of a treatise published in England in 1820, calling attention to the adulteration of food and its often injurious effects upon the system, says the Medical Times. Owing to chemical discoveries the facilities for adulterating food within the past few years have been much greater than ever before, from the fact that almost every variety of food is now put up in enormous quantities in cans, and spices of every kind, pulverized and sold to the public in small packages, so that their purity can only be detected by careful analysis. Some of these

adulterations are comparatively harmless, simply decreasing the strength and value of the product, but others, which are more commonly used in the finer quality of goods disguise their real condition, and by their drug action disturb the digestion and poison the blood.

An article in the Lancet, of April 22, speaks of meat extracts of "*vile origin*," showing they are sometimes made of putrid liver and offal, and that such filthy material is fabricated into a toothsome paste, the use of deodorizers and subtle flavoring material having been placed at the disposal of offalmongers by the advance of chemical knowledge. Of course cooking would destroy most noxious germs, but their products, the poisonous ptomains, would remain and their presence in an extract would cause very serious symptoms of poisoning. The proceedings of the War Investigating Committee called the nation's attention to the action of adulterated food, and if it was productive of no other benefit it led to official reports in several States of the alarming extent to which the adulteration had been carried with well-localized cases of poisonous results.

Mr. Wells, the Pennsylvania Food and Dairy Commissioner, states that chemical companies have agents traveling all over the State selling to butchers chemicals for preserving meat. The packages are labeled, telling how they are to be used. And some of them are used when the putrefaction has already commenced. In the last annual report of the Connecticut Experimental Station it is stated that of sixty-three samples of jellies, two-thirds were adulterated not only with starch and glucose, but with aniline dye and salicylic acid. Out of forty samples of marmalades and jams only three were pure. Of forty-seven samples of beer and ale twelve contained salicylic acid, and nineteen samples of sausages and oysters were found embalmed by boric acid. Salicylic acid as a food preservative has been forbidden by several European governments. Here it is largely used by cannerymen and butchers. The Department of Agriculture found it in fifteen out of twenty samples of string beans, in ten out of twelve samples of baked beans, and in twenty out of forty-one cases of corn.

Is it any wonder, in face of this adulteration of so many of the common articles of daily food, that so much dyspepsia and general derangement of the system, produced by it, exists to so large an extent in our populous towns and cities? Salicylic acid, the favorite preservative used, has been pronounced by the Paris Academy of Medicine not only provocative of, but especially

injurious to, dyspeptics. The bodily sufferings of hosts of individuals for which no adequate cause is assigned are undoubtedly due in many, very many, cases, to the systematic food poisoning for the profit of dishonest dealers. The coal-tar products are used to a large extent in cheap confectionery and in the flavoring extracts of the kitchen. In a western hotel nearly all the guests became sick, and the cause was traced to the cheap coal-tar extracts used in the kitchen. To remedy this wholesale poisoning from adulterated food it has been suggested that a national food commission be organized with the power of examining manufactured products and testifying as to their quality, these products of foods and drink to have on printed labels the contents of the packages. Every physician, if properly trained in laboratory work, would be entirely competent to determine the condition of every product of food or drink, as it regards adulteration, submitted to him. But to accomplish this more efficient instruction should be given in chemical analysis in our medical colleges, and questions introduced into the State medical examinations fully testing the knowledge of students in the action of drugs used in all adulterations connected with food and drink, and their ability to detect these poisons by the necessary unfailling scientific tests. The examination by the State Board of Examiners in this department of medical studies should be so minute and so exhaustive as to leave no doubt that the student was thoroughly competent for all the details of the work as it regards examination, and the medicinal action of the materials used upon the human system. We respectfully call attention of the Regents to the importance of this suggestion.

Compulsory Vaccination in North Carolina.

The Virginia Medical Semi-Monthly says, we are glad to note that the Supreme Court of North Carolina, during its March session, 1900, at Raleigh, sustained the decision of the lower courts when they declared constitutional the law requiring compulsory vaccination.

It is indeed surprising to learn with what decided opposition some Health Boards have had to contend in their efforts to carry out the vaccination acts of various States. To what can this opposition be due? Certainly there has always been a class of skeptics among the laity; vaccination is a thing they do not understand, and nothing but education will ever convince them of its importance. Unfor-

tunately there are unscrupulous fakirs in the profession, who, knowing better, seek a cheap notoriety among the ignorant by all sorts of deceptions as to the dangers and failures of vaccination. It is a pity that such unprincipled persons cannot be ruled out of practice just as dishonest or disreputable lawyers are disbarred by the courts in which they attempt to practice. Such doctors sometimes undertake to teach their ignorant patrons that all kinds of diseases are inoculated by vaccination, though done aseptically. We have even heard of such infamous doctors teaching these people that horns may grow, that their skins may turn like that of a cow, that their dispositions may be changed, and even that vaccination, though properly done, has no preventive effect. More common is it to hear of these doctors teaching that there is great danger to life by vaccination, that arms have to be amputated—in short, that the remedy is worse than the disease. Undoubtedly cases of exceptional severity do occur, but for such general teachings to be made to the public is untrue and dishonest.

Again, we often hear, when duly authorized vaccinators are making the rounds, that the family physician gives an ill-health certificate to the effect that it is dangerous for so and so to be vaccinated, when in reality such certificate is sought by the patient for the purpose of evading the law. The moral tone of the profession should condemn the giving of these certificates, unless there be actual reasons, which are few, for them.

Lobar Pneumonia.

According to the Boston Medical and Surgical Journal, a very interesting series of statistics regarding 500 cases of lobar pneumonia treated in ten years in the wards of the Mount Sinai Hospital has been prepared for the Hospital Reports by Dr. Alfred Meyer, attending physician to the hospital. The youngest patient was four months old, and died, and the oldest was seventy-seven years, and recovered. The total deaths were 94, a mortality of 18.88 per cent. Omitting 23 cases that died within forty hours after admission, the mortality for the series is only 14.20 per cent. There was a very high mortality under twelve months (67.34 per cent.), an almost uninterrupted fall in the mortality up to thirty years of age, and then a rise for every decade up to seventy years, which latter gave a mortality of 50 per cent. The mortality was nearly three times greater between thirty-one and forty than between twenty-one and thirty, and nearly twice as great

between forty-one and fifty as between thirty-one and forty. The mortality in female cases was 23.68 per cent., and in male cases, 11.66 per cent., a proportion agreeing almost exactly with that given by Juergensen in Ziemssen's Encyclopedia. Out of 263 cases there were 63 lyses and 200 crises. Of 200 crises, 79 fell on even days and 121 on odd days. All cases were considered as having defervesced by crisis in which the temperature fell from 103 or over to normal within forty-eight hours. In the 263 cases with complete histories the average duration (from the beginning of the disease to the cessation of fever) was thirteen days. As to site, the figures agree with those authors in showing a more frequent involvement of the right lung than of the left. The left lower lobe was the most frequent seat of disease, occurring in 26.62 per cent. of the cases. Pneumonias involving the right lung were more fatal than those involving the left, in the proportion of 13.50 to 8.18. There was not one fatal case of left upper pneumonia, though there were 36 in this site out of 325 cases. This does not support Juergensen's view that the prognosis is better when a lower lobe is involved. Pulmonary edema was both the most frequent and the fatal complication. It occurred in 5.8 per cent. of the cases. There was pleurisy with effusion in 5 per cent., and pericarditis in 2.2 per cent. The cases occurring in summer appear to have been more benign than those of other seasons, for, though they represent 16.16 per cent. of the morbidity, they give only 8.51 per cent. of the deaths.

MISCELLANEOUS.

LITTLETON, N. C., June 23d, 1900.
To the Editors of The Charlotte Medical Journal:

SIRS:—I am heartily in accord with your criticism of the Chairmen of the Sections who had no papers prepared under them. As Chairman of the Section on Gynecology, I had no paper but my own, I think, perhaps, my excuse is valid, and as I made no apology to the Society, as I intended, I ask you to kindly publish this so that the members may know the reason therefor. Immediately after being notified of my appointment, I began writing letters to different members of the Society requesting papers. In all I wrote sixty or seventy letters, receiving only four replies to them. Of these, only one consented to prepare a paper and he failed at the last moment.

I am greatly indebted to my townsman and friend, Dr. Picot, for his valuable ad-

vice in suggesting names of physicians likely to contribute. I even appealed to our honorable Secretary, but presume he was too busy to reply. I felt very much chagrined at being unable to secure any papers, but have the conscience of making an honest effort.

Your criticisms are upon the whole quite appropriate. Every member of the Society should attend the annual meetings, enter into the discussions, contribute his or her experience and so help one another. I trust the Chairmen of Sections for the coming meeting will be more fortunate. There are always cases in one's practice which are interesting, and if related at these meetings would materially benefit and guide others in their management.

There is only one suggestion I have to make. The meetings should be held at least ten days or two weeks earlier than the last one, especially for the eastern counties. Held thus early, before the advent of settled hot weather, many would attend who would otherwise be kept at home by reason of sudden outbreaks of bowel and other disturbances.

Very truly,

B. RAY BROWNING, M.D.

Extraordinary Announcement.

Universal interest and excitement among publishers and printers has been caused by the announcement of Messrs. William Wood & Co. that an entirely rewritten and completely revised edition of the *Reference Handbook of the Medical Sciences* would be issued in a short time.

This great work in its previous editions needs no introduction to the medical profession in this country or abroad, but if the edition of 1884 was great what shall be said of that of 1900.

The reputation made by the first edition will be more than sustained and the publishers are to be congratulated upon the fact that their liberality laid the foundations so broad in the first work that it will support in safety the superb structure they are now erecting.

The work will be symmetrical in all its parts, and while the purely scientific branches will be treated at length, the practical part of medicine will not be neglected.

The revised edition will consist of eight splendid imperial octavo volumes containing more than 5,000 engravings by the best processes known, and from 40 to 50 full-page lithographic plates in colors and tint. The pages will be of large size and printed in double column.

About 500 of the leading men will furnish the material for this great work, and everything will be rewritten and up to date.

To those who are the fortunate possessors of the original edition it is only necessary to mention the name and they will spare no pains until they have it.

To the others we can promise that this work will be to them a compact medical library in itself.

Christian Scientists and the Elephant.

There seems to be no limit to the ambition of the disciples of Eddyism. The latest stroke of advertising consists in making application to the Superintendent of the Central Park Zoo to treat "Old Tom," the elephant who has recently been indisposed. When told that they would not be safe for a moment in the cage with Old Tom they insisted that that made no difference, they could cure him at their homes, remarking that they often have patients as far away as China. Whether these patients are elephants appeareth not. As the elephant was already convalescent, we may hope soon to hear from the scientists that they have effected a complete cure.—*Medical News*.

Drunkenness in the French Army.

If it be consoling to know that we have companions in misfortune, we British may find some consolation in the fact that the subject of drunkenness is causing great concern to the more thoughtful of our neighbors across the Channel. A French writer, M. Urbain Gohier, in an article published in the *Aurore* on May 6th, disclaims against drunkenness as ardently as any of our temperance advocates in this country. Moreover, he considers drunkenness to be a political danger. The voices that shout the loudest in riotous political meetings are those of drunkards; alcoholism is at the bottom of Boulangerism, of nationalism, of every war cry that has of late years excited the French nation. The spread of drunkenness in the army is also engaging the attention of the wise. As a consequence of inquiries that have been made on this point, the Minister of War has just addressed a letter to the generals in command of the various army corps. In this document the Minister, (General Gallifet) says that he has considered two alternatives, one of which was simply to restrict the hours during which spirituous liquors might be sold at the regimental canteens, the other the complete abolition of the sale of these, and that he has decided that the latter was the only satisfactory course. "I have decided," he

says, "to interdict absolutely the sale in the canteens of all *eau-de-vie*, or spiritous liquor of any kind, as well as the innumerable preparations known as appetizers." The last term is meant to cover absinthe and the various bitters which a digestion weakened by indulgence craves. The General does not, however, forbid the sale of ordinary fermented liquors, such as wine, beer, cider, perry, and, of course, permits the sale of tea, coffee, chocolate, and the like. It is only spirits that the interdict deals with. Perhaps General Gallifet thinks, as do many people, not altogether foolish, on this side of the Channel, that pure wine and beer are not very unwholesome or dangerous drinks.—*Hospital*.

The Treatment of Tetanus—With Clinical Reports.*

Tetanus has long been considered one of the most dreadful diseases, but improved therapeutic and surgical means have made the affection more tractable of recent years. The patient should occupy a room which has been darkened, and everything which tends to disturb quiet and restfulness should be, if possible, rendered inoperative. It will be found impossible to give these patients solid food, and we shall have to depend upon liquid diet. Milk and predigested foods of known value are to be employed in such quantities as will sufficiently nourish the patient. Rectal alimentation must be depended upon exclusively in some cases. The particular system of feeding which the physician agrees upon must be one which repairs as far as it is possible the waste going on in the economy.

It is now generally agreed that the tetanus bacillus is the causative factor in this affection. This fact should lead us in all cases of wounds to thoroughly cleanse the parts. If tetanus develops in a patient who has a wound already healed it is in accord with the best surgical usage of to-day to open this wound and remove any foreign body and close it after aseptic and antiseptic measure have been instituted.

In the treatment of tetanus many remedies have been employed, and comparatively recently, anti-tetanus serum has been given a trial. There is no proof that serum treatment is capable of rendering a substantial means of combatting this disease. It is true some favorable have been published, but the fact that the profession to-day is far from the adoption of serum as a reliable manner of treatment is a proof to my mind that it lacks intrinsic value. The remedies

*Milton P. Creele, M.D., Central City, Ky.

which stand at the head of therapeutic means are the bromides and chloral. The chemically pure bromide of potassium, and chloral combined with cannabis indica and hyoscyamus, as they are, in the formula of Bromidia, have in my hands proved an ideal remedy in the treatment of tetanus.

Bromidia must be given in full doses. On the first symptom of the disease a teaspoonful of bromidia must be given. This dose represents 15 grs. each of pure chloral and bromide potass. and one-eighth gr. each gen. imp. ext. cannabis indica and hyoscyamus. This dose must be repeated every three to six hours, as the patient may or may not be quiescent.

In some cases in order to control the spasm it will be necessary to give the patient along with each dose of the bromidia a dose also of morphine hypodermically. I may add, however, that in treating these cases we shall find it most necessary to watch our patient very closely. We may have in some cases to give the bromidia oftener, and in others we shall have to pay close attention to the heart.

Woorara and other similar drugs have been eliminated from the therapeutics of this disease because of their depressing action on the heart.

Below I subjoin a few clinical reports which are necessarily brief, but which reflect the treatment depended upon. Before taking up these cases, however, let me say when the heart beat is not full, or when the patient is not a strong man, it is well to look after the heart from the beginning of the attack. Digitalis or strophanthus in correct doses generally sustains the heart well:

Case 1. Aged 31. This man was walking up a well when a rock slipped from his hand, and in his effort to catch it he mashed his little and middle fingers. The bones in these fingers were fractured, and it was found necessary to amputate both of these at the second joint. The stumps healed promptly, but on the 10th day after the injury well marked symptoms of tetanus developed. He was a large well developed man and had never been sick before. He was put on bromidia in doses of a teaspoonful every three hours. This kept him quiet, but several times I gave him morphine hypodermically in connection with the bromidia. Rectal alimentation and liquid diet kept him well nourished. This patient began to improve in every way at the end of the third week and was practically well at the end of the seventh week. This patient had at no time any cardiac weakness.

Case 2. Aged 40. This was a case of

idiopathic tetanus. The patient had painful spasms and his heart was most irritable. He was fed as liberally as possible, and took bromidia in doses of a teaspoonful every three to six hours. He took as a heart regulator and tonic digitalis every hour while awake. This patient got along fairly well, at no time taking morphine. At the end of the fourth week the symptoms became modified favorably and the dose of bromidia was reduced gradually to one-half teaspoonful every four hours. He, however, had to take nutriment tonic for at least two months on account of the irritable condition of his heart. This patient was entirely recovered from tetanus in eight weeks.

Case 3. Aged 20. This girl had a painful but not dangerous burn on her hand which she simply treated with rag and nut-ton tallow. She was alarmed greatly one day to find herself in a tetanic spasm. The burn was treated properly, and she was given substantially the same treatment as in the above cases. This patient also had an irritable heart which only withstood its load by the regular administration of digitalis. This patient was discharged cured at the end of six weeks. In this case as in the others the dose of bromidia was speedily reduced as the symptoms showed improvement.

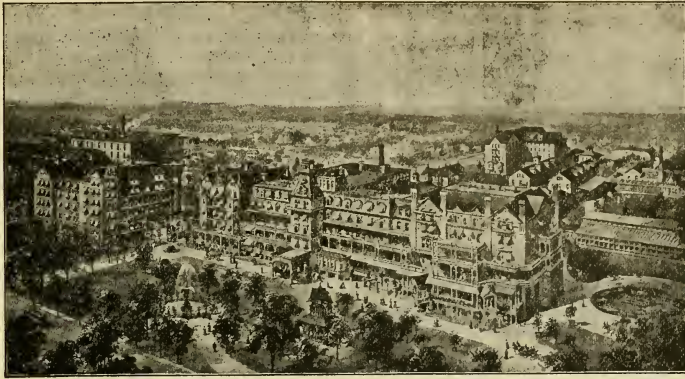
Case 4. Aged 27. This lady sustained a compound fracture of the forearm. About the seventh day symptoms of tetanus developed. She had violent symptoms and I had to ply bromidia in full doses. Very often, too, I was compelled to give her hypodermic injections of morphine. Her heart was looked after as indicated in the other cases. This patient was well in ten weeks from the date of her seizure.

Case 5. Aged 16. This boy was shot with a toy pistol. He paid no attention to his wound, allowing dirt to get into it. Tetanus developed. The wound was thoroughly cleaned and treated properly. Treatment was given along the lines indicated above and he made a recovery which occupied six weeks.

He Wanted to Help.

A burglar who had entered a minister's house at midnight was disturbed by the awakening of the occupant of the room he was in. Drawing his knife, he said: "If you stir, you are a dead man. I'm hunting for money."

"Let me get up and strike a light," said the minister, "and I'll hunt with you."—*Universalist Leader*.



The Battle Creek Sanitarium

Is a place where chronic invalids, especially those suffering from the various forms of indigestion, diseases peculiar to women, constipation, chronic malarial poisoning, anæmia, obesity, the uric acid diathesis, neurasthenia, migraine, and similar ailments are trained into health by the aid of systematic regimen, scientific hydrotherapy, massage, Swedish movements, Swedish gymnastics, and other rational means. Most cases of Bright's disease, diabetes, locomotor ataxia, and many other maladies which are incurable under ordinary conditions, are greatly improved by the combined use of rational remedies and systematic regime, and many are practically cured. Extensive bacteriological, chemical, and microscopical laboratories connected with the institution afford excellent facilities for accuracy in diagnosis and original research.

The Institution is conducted strictly within ethical lines.

For information concerning the facilities afforded, terms, etc., address

THE SANITARIUM, Battle Creek, Mich.

The Infinitely Little.

A London Parish has put forth a well-intentioned paper on the precautions which should be taken by the public in order to diminish the diffusion of tuberculosis; and has given therein an account of the tubercle bacillus which is distinctly funny, and which the Medical Officer of Health concerned should rectify, for the sake of his own reputation, in any subsequent edition of the document which may be required. Readers are gravely informed that the bacillus in question is so minute that "many millions" of them could "stand on the point of a common sewing needle." This appears to be a plagiarism from the Mahomedan account of certain angels; and it would be better to adopt a more common and certainly more truthful way of assisting persons who are familiar with microscopic objects to form some approximate notion of the size and shape of a bacillus. This may be done by saying that one million individuals, arranged in a thousand rows of a

thousand each, could be placed upon a penny postage stamp. Absurd exaggeration, of whatever kind, is more liable to defeat the ends of its employers than to promote them.—*Hospital*.

Brewer's Yeast in the Gastro-enteritis of Children.

M. Thiercelin and M. Chevre, (*Gazette des hopitaux*, January 9th; Medical Review, London, April) first administer an aperient. The intestine is then washed out, and a teaspoonful of dried yeast, dissolved in from fifty to sixty grammes (two fluid ounces) of boiled water at about 98 F. is introduced by a rectal tube. The tube is withdrawn, and the child is kept still so as to retain the injection as long as possible. With the exception of the aperient, this process is repeated thrice daily. A *diète hydrique* is maintained. The writers state that the results are extremely encouraging.—*New York Medical Journal*.

Motives for Treating Diphtheria with Antidiphtheritic Serum.*

Having had considerable experience in the use of Antidiphtheritic Serum during the past two years, I wish to record my observations as to its action and to demonstrate the results of its rational use.

During the period referred to, I administered Antidiphtheritic Serum in ninety-five cases of laryngeal diphtheria, of which twelve terminated in death. Of the entire number nine cases were complicated with measles—two ending fatally. Deducting, therefore, the complicated cases, it will be apparent that of eighty-six cases of pure laryngeal diphtheria, ten resulted fatally.

I had also to combat an epidemic of measles during the diphtheria epidemic. Many of the cases of measles became complicated with diphtheria, as I was convinced by frequent physical examinations and constant examinations of the patients, while the circumstances were such that I was unable to make bacteriologic cultures from the faucial secretions as I had wished to do. The percentage of recoveries among my cases was fully equal to the results obtained in other places. For instance, the statistics of Dr. Kossel show a mortality from diphtheria of thirteen per cent. in the Berlin hospitals. The treatment of ordinary pharyngeal diphtheria which I employed was of a somewhat different nature, as I shall presently explain.

The following statement will show the effect upon the course of the disease of treatment instituted upon the first, second, and on up to the sixth day after the onset. Of eighteen children with true croup, who received the Antidiphtheritic Serum of Parke, Davis & Co. on the first day of the seizure, none died; of twenty-five treated on the second day, none died; of thirteen who received the first injection on the third day, one died; of sixteen cases treated on the fourth day, five succumbed; of eight treated on the fifth day three terminated fatally, and of fifteen which were first treated with Antidiphtheritic Serum on the sixth day of illness, three ended in dissolution.

I consider the cause of death as doubtful in one case first treated on the third day, for the reason that on the second day after the injection all symptoms of laryngeal stenosis disappeared and measles developed, with a catarrhal pneumonia, resulting in death on the tenth day.

Therefore, omitting this doubtful case, we shall have fifty-five cases of laryngeal diphtheria treated with Antidiphtheritic Serum

during the first three days of the disease, *without a single fatal result.*

When we consider the extreme difficulty with which croup is recognized during the earliest stage without the aid of a bacteriologic examination, such a large number of recoveries proves the great value of Antidiphtheritic Serum when used promptly with judgment.

I will now consider separately the cases treated with serum alone, and those in which other remedies were used in connection with it. The medical treatment referred to included expectorants, inhalations of slaking lime and turpentine or oil of pine, musk, camphor, sinapisms and medicated foot baths.

Of fifty-one cases in which these remedies were used in conjunction with Antidiphtheritic Serum, two terminated in death. One of these, as I have already explained, in all probability succumbed to measles complicated by pneumonia.

Of forty-four cases treated with the Serum alone, ten resulted fatally, or 22.7 per cent. All of the fifty-five cases placed under treatment during the first three days, terminated favorably, regardless of whether the Serum was used alone or in combination with other remedies. Of these fifty-five cases twenty were treated with Antidiphtheria Serum alone.

In cases in which treatment was begun after the fourth day, Antidiphtheritic Serum acted less favorably, ten deaths having occurred among twenty-four patients, a mortality of nearly 42 per cent.

Among cases in which treatment was begun after a lapse of several days, seven out of ten deaths occurred a few hours after the injection, and one as late as twenty-four hours thereafter. Here, unquestionably, the Serum was given too late to be of service; and yet I believe that even in these desperate cases we would secure more successful results if we could by artificial means sustain the action of the heart and respiration until the Serum begins to manifest its effect.

I have observed cases which appeared to be entirely hopeless, but after the administration of the Serum and an all-night struggle with death the little patients would expectorate large pieces of membrane, the respirations would become less labored and eventually recovery would ensue. I also am of the belief that favorable results will more speedily follow the combined method of treatment than if the Serum alone be used.

In my experience eruptions never followed the injection of Antidiphtheritic Serum, nor did I notice any baneful after-effects.

*G. Aftel, M. D., Toledo, Ohio.

Some of the children complained of pain at the site of the puncture, but for a few hours only. In most of my cases the temperature rose at night to 102 deg. after the injection, but declined toward morning coincidentally with the appearance of free perspiration. Occasionally the high temperature lasted only about twelve hours.

The dose of Serum for children under three years of age did not exceed 1000 anti-toxic units. In children over three years of age the dose did not exceed that strength if the type of disease seemed mild and the case was seen during the first or second day. Under other circumstances from 1500 to 2000 units would be the usual single dose. A single dose was generally sufficient, for in only three cases was a second injection given.

It has been conclusively demonstrated that Antidiphtheritic Serum is not harmful. On the other hand its effects are now recognized to be eminently beneficial, especially when given before the third day. Even after the third day it acts well with the assistance of other remedies.

I treat ordinary pharyngeal diphtheria with a remedy used by Dr. Backiewicz, consisting principally of iodoform. This is forced into the throat by insufflation either alone, or alternately with boric acid. I was obliged to resort to Antidiphtheritic Serum on the third day in three out of forty-two cases treated by this method, on account of an apparent aggravation of the symptoms. All of these cases recovered. I consider it proper to use iodoform in the manner referred to in all ordinary cases of pharyngeal diphtheria when there is no evidence of laryngeal involvement. In the latter contingency Antidiphtheritic Serum should by all means be resorted to as early as possible. To claim the best results I advise the use of Parke, Davis & Co.'s Antidiphtheritic Serum only; the other brands are not so good.

Physicians Must Pay Taxes.

The Mississippi State Legislature recently passed a bill imposing the following annual graduated tax upon physicians practicing in that State: Physicians practicing in towns of 3,000 or more inhabitants, \$10; in towns of less than 3,000, \$5; in country districts, \$2.50. Heretofore physicians have never paid taxes in this State.—*St. Louis Courier of Medicine.*

Full many a man, both young and old.
Is sent to his sarcophagus
By pouring water, icy cold,
A-down his warm oesophagus.

—*Journal of Med. and Science.*

THE ALKALINITY OF BLOOD SERUM

GLYCO= THYMOLINE

(KRESS)

ALKALINE, ASEPTIC, ALTERNATIVE.

In treatment of

Summer Complaints AND Dysenteric Conditions

Corrects hyperacidity
and allays Enteritis.

Administered internally Glyco-Thymoline (Kress) acts as a carminative, antiseptic, alternative, stimulant, antacid and meets many of the requirements of the physician during the summer months.

_____, M.D., Cleveland, O., reports among other cases, as follows:

John T—, two months old baby, typical case of Cholera Infantum, had small hopes of saving the little one; put him on equal parts of Liq. Bismuth and Glyco-Thymoline (Kress), one-half teaspoonful doses every three hours. It controlled the vomiting and regulated the bowels and the child made a nice recovery.

_____, M.D., Washington, D. C., writes:

I have used Glyco-Thymoline (Kress) very successfully the past season in many serious cases of dysenteric troubles as also in other alimentary ailments with great benefit.
Feb. 16th, 1900.

_____, M.D., Cleveland, O., states:

He has used Glyco-Thymoline (Kress) in nose and throat inflammations and Gastritis, and during the summer he has tried it in a number of cases of Cholera Infantum. The formula is the proper one for such purpose. I notice a change in the stools in some cases in three or four hours after administration of the remedy, discharges lessen in frequency and assume a normal character.

SPECIAL OFFER.

A full-size bottle of Glyco-Thymoline (Kress) will be sent to any physician who will pay express charges.

Kress & Owen Company, Chemists, 221 Fulton Street
New York.

Paul Gibier, M. D.,

The sudden death of Dr. Gibier, the result of a runaway accident, deprives the New York Pasteur Institute of its founder and director and the profession and the community of an accomplished scientific investigator and a genial gentleman. Although French by birth and education, Dr. Gibier had been among us long enough to make many warm friends and to secure general confidence in his management of the institution under his care.—*N. Y. Med. Jour.*

Physicians Should Dispense Their own Medicines.

The Medical News, in support of this practice, presents the following propositions:

1. Chemical and pharmaceutical science and art have reached such perfection that it is now possible, and even convenient to do so.

2. It saves the patient money and trouble.

3. The ordinary character finds it hard to pay for simple advice.

4. In emergency cases, and in severe forms of acute disease, time is saved and the disease more effectually withstood by the immediate administration of the needed remedy.

5. The accidents of prescription-writing and of prescription-filling are lessened, while at the same time (with proper care and watchfulness over laboratory preparations) the efficacy and physiological effects of drugs are assured.

6. It will lessen the evils of hospital abuse, drug-store doctoring, the system of druggist's commissions to physicians and of counter-prescribing.—*Four. of Med. and Science.*

A brother and sister started for India, intending to spend several years in that country. An agreement was made with the brother left behind that letter-writing was a waste of time, and that if anything of real importance occurred they would cable.

After a few months, the brother at home received the following message, "Sister dead."

Shocked and grieved, he cabled in reply, "Send body home."

In due course of time it arrived, and it was discovered that the body of a tiger had been sent in place of the sister.

Then another cablegram flashed across the waters, "Mistake—Tiger sent instead of sister."

The reply came shortly, "Sister inside of tiger."—*Journal of Medicine and Science.*

The Relief of Thirst.

Dr. A Philip writes to the Lancet for May 26th referring to a mode of quenching thirst by keeping a small round pebble in the mouth. Thirst disappears and perspiration is diminished. Dr. Philip states that he has gone as long as eight hours and a half in a broiling sun with nothing but dry biscuits and cheese for a lunch and at the end of that time was not particularly thirsty. This plan is by no means new, though as it is probably not so widely known as it deserves to be, we reproduce it. We have ourselves made frequent use of it with good effect.—*N. Y. Medical Journal.*

A Wisconsin police magistrate recently fined two "Christian Science" healers for illegal practice of medicine. The usual defense, that their methods did not constitute the practice of medicine, did not succeed with the judge, who held that any kind of treatment of the sick for a fee comes under the provisions of the law; that when "Christian Science," which as a religious belief is entitled to toleration, undertakes to treat the sick it should do so under the sanction and conditions of the law, and failing this, its practitioners are liable to its penalties. The decision will probably be appealed and may go to the supreme court and become a leading case. If that should occur, we have no doubt that the opportunity to ventilate the methods of this delusion will be fully improved and we trust the higher Wisconsin court will follow the same course as has this police magistrate.—*Journal A. M. A.*

The following story on Lord Roberts gained great currency in the British army a few years ago, says Collier's Weekly: The dirtiness of the Afghan is proverbial, and it is said that on one occasion General Roberts captured a soldier who was so exceptionally dirty that it was thought necessary, for the safety of the whole camp, that he should be washed. Two genuine Tommy Atkinses were told off for this purpose. They stripped the prisoner, and scrubbed at him for two hours with formidable brushes, and a large quantity of soft soap. Then they threw down their brushes in disgust and went to their captain. "What is it, men?" "Well, sir," they replied, somewhat excitedly, "we've washed that 'ere Afghan chap for two hours, but it warn't any good. After scrubbing him, sir, till our arms were like to break, blessed if we didn't come upon another suit of clothes!"—*Journal of Medicine and Science.*

Rockbridge, Va., Alum Water.

That are of Intrinsic Value to the Medical Profession.

Extract from a paper read before the Atlanta Society of Medicine, April 26, 1887, by JOHN S. TODD, M. D., Professor Materia Medica and Therapeutics, Atlanta Medical College, Ga.; Ex-President of Georgia Medical Association; not read in our interest, but in the interest of Science and his profession:

"Some four and a half years since I had, among other cases, one of dysentery, which resisting all medication, became chronic, and a LARGE ULCER OF THE RECTUM DEVELOPED. I called in consultation a noted surgeon. The patient's condition was one of extreme emaciation; blood and mucus in large quantities were voided about an average of once an hour. The dose of opium had been increased to 3 dr. laudanum in twenty-four hours and $\frac{1}{4}$ gr. morphine twice a day, and still matters grew worse. We decided to inject solution 30 grs. to oz. nit. silver in rectum. The result was a COLLAPSE that nearly proved FATAL. Upon it being suggested later that the operation be repeated, the patient, a young man, said if we and his family insisted, to avoid it HE WOULD COMMIT SUICIDE. Dr. W. S. Armstrong was then called in with me. He suggested an exclusively milk diet, gradual reduction of opium, and ROCKBRIDGE (VA.) IRON AND ALUM WATER. Immediate improvement set in, and in TEN DAYS so great was THE CONSTIPATION that oil and enemas had to be resorted to procure an evacuation from the bowels. Since that time I HAVE TREATED SEVERAL CASES EQUALLY AS BAD, WITH SAME HAPPY RESULT, using same diet and medicines, for of all agents for this disease, I consider THE ROCKBRIDGE ALUM AND IRON WATER THE FIRST. It is equally EFFICACIOUS in CHRONIC DIARRHŒA, AS MY RECORDS ATTEST."

DR. TODD, March 21, 1900, writes: I have for 16 years used these GRAND WATERS constantly in my practice with increased and increasing satisfaction, I inclose you article written 3 years ago on opium. "In chronic diarrhœa and dysentery, the milk diet, ROCKBRIDGE ALUM WATER, and small doses of opium given cautiously—very cautiously lest your patient acquire the opium habit—has proved so INVARIABLY SUCCESSFUL with me, that I have COME TO TREAT THESE CASES WITH A CONFIDENCE BORN OF SUCCESS."

DR. HUNTER MCGUIRE, Virginia's great surgeon, says: As an astringent and tonic it is one of the most valuable I have ever used.

DR. S. GAILLARD THOMAS, Professor College of Physicians and Surgeons, N. C.: Most efficient astringent and tonic waters I have ever employed.

Write JAMES A. FRAZIER, Mgr. Receiver, Rockbridge Alum Springs, for Pamphlet.

Osteopathy as She is Taught.

The installment plan and the absent method has struck a certain school of osteopathy in the west. Mail courses are coming to be quite the thing now and a fellow can stay at home and work a one-horse farm and learn a profession at the same time.

The school in the East is trying to raise the standard, if the system can be said to have a standard, but the lightning calculators in the West will more than undo their work.

The following advertisement was clipped from an exchange:

Osteopathy Home Study Course Taught by mail. Adapted to every one. Practical, thorough, original. Installment plan; costs one-fourth as much as regular college course. Use your spare time. Diplomas to graduates. The only profession not overcrowded; no starvation period for osteopaths. Best of references. Particulars free. Home Study Department Illinois College of Osteopathy, Chicago, Illinois.

As a sample of what is offered as a pure food, the following recipe is quoted by Trade as the result of a recent investigation made at a pure food exhibition in Cincinnati, by the inspector of jams and jellies in charge of the exhibits: For one barrel of jam: Twenty pumpkins well cooked and washed, four gallons of sorghum, one quart of alcohol, one gallon of extract of raspberry. Cook for four hours and stir well. When done add about one bushel of millet or clover seed. This gives the proper amount of raspberry seed. Before taking from the fire stir in well four ounces of cochineal to give the proper color. When cool put in tubs. It goes without saying that by modifying the extract and the amount of coloring matter, any other variety of jam may as easily be manufactured, or in case it is already made up, a change of labels will accomplish the same result.

"Sonny, does your mother give you anything when you take your medicine?"

"No, ma'am, but she gives me something when I don't take it."—*Modern Medical Science*

The Phosphates of Iron, Soda, Lime and Potash, dissolved in an excess of Phosphoric Acid, is a valuable combination to prescribe in Nervous Exhaustion, General Debility, etc. Robinson's Phosphate Elixir is an elegant solution of these chemicals.

Vin Mariani in Exhaustion.

We have had occasion in numerous instances to administer "Vin Mariani" to business and professional men who complained of being gradually run down. The work of the office, the cares and worry entailed by business and the physical flaccidity brought on by overwork, all seemed to give way completely in a marvelously short space of time, despite the fact that the subjects continued uninterruptedly at their usual occupations. The notable fact to be observed is that in each instance the effect was permanent. But it must not be forgotten that, in order to make this result a lasting one, it is necessary to keep the patient upon a prolonged course in the use of "Vin Mariani." There is no doubt whatever that this preparation has proven itself a boon to mankind.—*The St. Louis Medical and Surgical Journal*, March, 1899.

Therapeutics of Urotropine.

The important place which urotropine has attained in genito-urinary surgery is exemplified by the fact that it was made the subject of a special paper by Dr. E. L. Keyes, of New York (*Philadelphia Medical Journal*) at the recent meeting of the American Congress of Physicians and Surgeons. Among the instructive cases reported by the distinguished author, there was one of persistent anuria following external urethrotomy which was at once relieved by the use of the drug, the symptoms again appearing when it was discontinued. Dr. Keyes always uses urotropine when urinary chill is present, or is threatened, and it appears to be almost a specific in acute catarrhal pyelitis. Large doses may be necessary at first, these being followed by long-continued smaller doses. As a prophylactic against urinary chill, urotropine is highly recommended. Attention is called by the author to the fact that in some instances the drug caused dysuria, or that urine passed during its administration had an irritating effect on wounds with which it came in contact. This, it seems to us, is only likely to occur under the use of very large doses, and especially where the patient does not receive an adequate amount of water, so that the urine becomes highly concentrated. Dr. Keyes, however, instances a case of enlarged prostate in which $67\frac{1}{2}$ grains were given daily for months, and the patient rendered perfectly comfortable. According to Nicolaïer, who has made the most thorough experimental and clinical study of urotropine, a daily amount of 15 to 22 grains is usually sufficient to obtain the desired therapeutic ef-

fect, and he advises that each dose should be dissolved in at least one-half pint of water. If larger doses are employed the quantity of water should be correspondingly increased.

The utility of urotropine in genito-urinary surgery is well summed up by Dr. W. T. Belfield (*Progressive Medicine*, Dec. 1, 1899), in the following statement: "Urotropine is of extreme value to the surgeon also, giving him the ability to secure, before and after operative measures, that ardently sought 'sepsis of the urinary tract' hitherto usually unattainable. The drug should be administered for several days before and after every operation upon an infected urinary tract."

The Subcutaneous Injection of Gelatin as a Preventive of Operative Bleeding.

Carchezy (*Centralblatt f. Chirurgie*, No. 3, 1900,) did not observe any noteworthy results from this procedure; though he noted that capillary bleeding was lessened when gelatin was used. As an offset to this, hematomata frequently developed after operation. In one instance there was dangerous secondary hemorrhage. Injection was administered an hour before beginning the operation, 200 cubic centimeters of a two per cent. solution being injected into the thigh on each side. In the urine, passed two hours later, albumin and an abundance of mucilaginous substance was found, but no peptone. Two hours later the urine was normal.—*Therapeutic Gazette*.

Hematologists are now working with an iodine stain for blood. It is said that leucocytes taking the iodine stain are only met with in grave affections with unfavorable prognoses, such as anemia gravis and perniciousa, and vanish as the prognosis becomes more favorable. The iodine reaction is positive in leukemia and negative in pseudo-leukemia. This stain promises, therefore, to become of great value, not only as a diagnostic means, but in a prognostic way. The combination of two such qualifications as that will surely make it invaluable to clinical laboratory workers. L. Hofbauer has obtained exceptionally good results with this iodine stain.—*Interstate Med. Jour.*

Lawyer: "I must know the whole truth before I can successfully defend you. Have you told me everything?"

Prisoner: "Except where I hid the money. I want that for myself."—*Collier's Weekly*.

SUMMER HEAT: Its Ill Effect Upon Infantile Life

Whilst it is not contended that summer heat, *per se*, exercises any ill effect upon infantile life, the intense heat of summer, coupled with improper diet and unsanitary surroundings, undoubtedly will increase the mortality among infants. Artificially fed babies especially suffer.

A wise saying of the ancients, *obsta principiis*, has special application here. The importance of cleanliness, appropriate food, and regularity in feeding should be impressed upon the caretaker of the infant.

From the writings of medical practitioners of wide experience in this field, we have compiled a pamphlet which we designate the "Summer Pamphlet." In it will be found many highly valuable suggestions for the care of infants and children during the heated term, together with various formulæ suggesting treatment for infantile digestive disturbances, all of which tend to show that the base of many successful prescriptions for "summer complaint" is

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**Lambert Pharmacal Company,
SAINT LOUIS.**

The Hospital Treatment of Pulmonary Tuberculosis.

Other things being equal, it may be admitted that certainly not less good results should be obtained in the treatment of pulmonary tuberculosis at home than in institutions. If, however, nursing, care, food, sanitary conditions, and the like are open at all to suspicion at home, the chances for the patient are much better in a well-equipped hospital. How successful may be the results under the latter condition is illustrated by Chapter (*Berliner klinische Wochenschrift*, 1900, No. 12, p. 253), who presents in tabular form the statistics of the Charité Hospital in Berlin for ten years, from 1889 to 1899. In the year 1889-90 recovery or improvement took place in 45.7 per cent. and death in 54.2 per cent. of the cases of pulmonary tuberculosis, and in the year 1898-99 recovery or improvement in 54.8 per cent. and death in 34.3 per cent. of the cases. These satisfactory results are attributed, among other things, to early diagnosis, to better care, the more effective medication, and the relation between the hospital and the sanatorium. In the Institute for Infectious Diseases, which was opened in 1892-93, recovery or improvement took place in sixty-one per cent. and death in twenty-three per cent. of the cases of tuberculosis received during the first year, and recovery or improvement in sixty-one per cent. and death in twenty-nine per cent. in 1898-99.

The conclusion to be drawn from these experiences is that with further improvement in hygienic conditions still better results may be possible and should be secured. In addition, special institutions will have to be organized for the care and treatment of incurable cases of tuberculosis.—*Medical Record*.

Pasteur's Absent-mindedness.

There is a good story told by the London Telegraph about Pasteur taking microbes in a liquid form.

He was dining with his daughter, her husband, and their family one evening, in their country residence in Burgundy. Cherries formed part of the dessert, and the savant ate a good many, taking care, however, to dip the fruit well in a glass of water, and then to wipe it thoroughly dry before putting it to his mouth.

His scrupulous care caused mild laughter at the table, whereupon Pasteur gently rebuked his relatives for their indifference to the fact that the exterior of the cherries was covered with infinitesimal and invisible microbes. He then launched forth into a

long argument, to prove the existence of the unseen animalculæ, and wound up by advising his hearers never to touch fruit without washing it.

A few moments afterward, the savant, who had fallen into one of his fits of abstraction, suddenly seized the glass in which he had washed the cherries, and drank the water and the microbes contained therein at a single draught.—*Journal of Medicine and Science*.

A Curious Conception.

A woman named Akroyd, says The Barrister, was tried before the Court of Queen's Bench in Dublin for refusing to produce a child which she had abducted. Some amusement was created in court when the prisoner was sentenced to six months, without hard labor, in Richmond prison, which is only for the incarceration of males. Carved in the stonework over the main entrance to the prison are the following words: "Cease to do evil, learn to do well." The commitment was the subject of the following lines;

In most earthly tribunals some harshness prevails,

But the Court of Queen's Bench is both prudent and mild;

It committed Miss A. to the prison for males,

As the readiest mode of producing a child. How she'll do so surpasses conception to tell Should she "cease to do evil, and learn to do well;"

And if in six months, without labor confined,

She produces a child, she'll astonish mankind.

[*New Orleans Med. and Surg. Jour.*]

W. A. Baker, M. D., Clark's Mills, Pa., says: I have had occasion to try Celerina, and am highly pleased with the results. I have used it with marked success in nervous prostration. A lady, 64 years of age, of nervous temperament, was stricken down with congestion of the right lung. After the congestion disappeared, her nervous system failed to recover, resulting in prostration. After trying several remedies, I commenced using Celerina and gave teaspoonful doses every six hours, with steady improvement, until restored to normal condition.

Simkins: What makes your nose so red, Timkins?

Timkins: It glows with pride, sir, at not poking itself into other peoples business.—*Tit Bits*.

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Unguentum Resinol.*Antipruritic, Antiphlogistic,**Nutrient and Plerotic***Elixir Cascanata.***Alterative, Laxative,**Antacid and Secernent.***Resinol Soap.***Prophylactic,**Germicidal, Etc.*

"Resinol is the best remedy I have ever used in Pruritus Ani.

GEO. H. SMITH, M. D., Brooklyn, N. Y."

I have requested our druggists to carry UNGUENTUM RESINOL and RESINOL SOAP. They are all right.—

RESINAOL has given me entire satisfaction. Its wide range of usefulness especially recommends it.—

A. E. EARLY, M. D., Kingman, Arizona.

Am prescribing UNGUENTUM RESINOL with great satisfaction.—J. S. BEAUDRY, M. D., Chicago, Ill.

Have used RESINOL in many cases and am exceedingly pleased with its action.—G. E. WILDER, M. D.,

Sandusky, Ohio.

I cannot find anything that can take the place of RESINOL.—A. AGEE, M. D., Holbrook, Ky.

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I have prescribed UNGUENTUM RESINOL with great success in Eczema, Pruritis Ani and Pruritis Vulvæ.—

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I am more than pleased with UNGUENTUM RESINOL.—C. B. WALRAD, M. D., Johnstown N. Y.

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Triumph of Mind Over Matter.

"This is to certify," writes Mr. Leonidas G. Flickensplutter, of No. 390 Blumlethorpe Avenue, Cleveland, O., "that on the 17th day of May, 1899, while splitting kindling wood in a shed in the rear of my kitchen, and using my left hand because of a momentary delusion that I had a sore place on my right hand. I brought the hatchet down in such a manner as to convey to my mind the false impression that I had severed my right thumb from the hand.

"The impression was so clear, in fact, that I fancied I saw the severed member on the floor of the shed.

"Following out the delusion—as I knew it to be—I picked up the imaginary thumb, clapped it immediately upon what appeared to be the bleeding stump, wrapped a bandage about it, and went my way.

"After the lapse of a few days I took off the bandage. The thumb, however, appeared to come off with it. I threw it away and, still holding the thought, refused to recognize the delusion that my thumb was gone.

"I refuse still to accept the delusive evidence of my eyes, which, being merely matter and therefore wholly imaginary and unreal, are not entitled to any credence on the part of the real or internal man, and I assert in the most positive manner that my thumb is not missing. It is still there. Realizing this, I use the hand as formerly, and have triumphed completely over the delusion, except that I find myself compelled—so strong is the influence of defective early training—I find myself still compelled, I say, to use my left thumb in opening my penknife.

"But I confidently hope to overcome even this in time.

"There is nothing so deceptive and unreal as matter, and I close with the sincere hope that my case may afford encouragement to all doubters."—*Chicago Tribune*.

"Wild Hairs."

"Wild hairs" are something that are often talked about by persons who seek treatment, yet it is given but little attention by the text-books. By "wild hairs" patients mean the cilia which turn in and touch the eyeball, or very small, short, white cilia which protrude from the lid margins as little stubby, stiff hairs, coming in contact with the cornea during the act of winking, or, what is much more frequent, the term is applied to any condition of the eyeball or lids in which there is sufficient friction between them to produce a scratching sen-

sation. Under the latter classification we see trachoma, ulcer of the cornea, catarrhal conjunctivitis, foreign bodies in the conjunctival cul-de-sac or on the cornea, limy deposits in the meibomian glands, etc. From this it is very apparent that a grave condition of the eye may be neglected by the patient because he thinks he has "wild hairs." While, on the other hand, innocent eyelids may be almost entirely deprived of their cilia by the obliging friends of the patient, who will work industriously to pull out the lashes one by one until nearly all are lost.

In cases where the cilia actually turn in the condition should be dealt with by an operation on the lid, which will turn the lashes forward, or, if they are few in number, they may be destroyed by electrolysis. In every case the first thing is a proper diagnosis, with proper treatment directed toward the cure of the condition.—*Medical and Surgical Monitor*.

Recent Deaths in EuroPe.

The following well-known physicians have recently died: George Edward Williamson, F.R.C.S. He had for many years devoted himself to ophthalmology, and was held in high esteem by his colleagues. Thomas Fitz-Patrick, M.D., M.A. (Dublin), M.D. (Cantab.), M.R.C.P. (Lond.). He practiced medicine in London, and beyond his talent as a physician was a man of unusual culture. Julius Althaus, M.D. (Berlin), M.R.C.P. (Lond.). Dr. Althaus was a voluminous writer, chiefly on electrical treatment and disorders of the nervous system. Dr. Heinrich Laudahn, director of the Lindenburg Asylum, Cologne. Dr. Leopold Grossmann, the *doyen* of Hungarian Ophthalmologists, at the age of seventy-nine years. Dr. Korsakoff, professor of mental diseases in the University of Moscow.—*Boston Medical and Surgical Journal*.

Long Skirts and Disease.

The opinion is gaining ground in the profession that the continued prevalence of grip is due very largely to the germs being carried into the houses by the trailing skirts of women. Already it has been recognized that the dried sputum of tuberculous patients is being carried into homes and disseminated in the same way. Reform in this matter must come from the intelligent classes in every community. A few women of recognized social position could easily set the stamp of fashion upon the hygienic short walking-skirt.—*Medical News*.

ODOZONE—MERRELL.



ODOZEN—an iodine derivative of methyl salicylate (true oil of wintergreen). It has an agreeable odor, is non-irritant, and combines the antiseptic, discutient, alterative and absorbent qualities of iodoform without any of its characteristic disadvantages.

The iodine being liberated very slowly in the presence of heat and moisture, no toxic effects may be apprehended.

The density of Iodozen is less than that of iodoform, hence a given quantity will cover a larger surface; it is, therefore, more economical.

Iodozen is absorbed slowly and adheres to sores and mucous membranes for a considerable period, and in the meantime exerts a protective as well as antiseptic effect.

These qualities place Iodozen in the front rank of antiseptic applications in the treatment of aural, venereal, and cutaneous diseases, in minor surgery and catarrhal affections of the uterus and nasal mucous membranes.

Iodozen, when mixed with powdered boracic acid in the proportion of 5 to 10 per cent. and used by insufflation, is of value in post-nasal catarrh and ulcerated conditions of the throat, but in specific lesions it is advisable to apply Iodozen pure, in order to produce the necessary antiseptic impression.

A useful dusting powder for the chafing of infants is made by combining Iodozen 5 per cent. with powdered starch—in erysipelas, Iodozen may be advantageously applied to the inflamed surface undiluted.

Combined with vaseline or lanoline, Iodozen forms an ointment of general utility as a healing application, and for the relief of puritis ani and vulva, hemorrhoids, prostatic irritation and gonorrhœa, in which affection it may be used as an injection.

Additional therapeutic applications:

Acne Rosacea	Eczema of auditory canal	Prurigo
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Arthritis	Goitre	Scrofuloderma
Abrasions	Hemorrhoids	Sycosis
Abscesses	Impetigo	Sun-burn
Burns	Irritation of the skin	Septal ulceration,
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Recent Advances in the Treatment of Insomnia.

This paper (The Medical News, April 14th, 1900,) is a continuation of one which Professor Reynold Webb Wilcox, of New York, presented to the British Medical Association at its meeting in Montreal in September, 1897. At that time he developed three theories which had been more or less accepted as accounting for the phenomena of sleep. These are: First, the theory of cerebral anæmia; second, the theory of chemical origin; and, third, the theory of the neurons. Investigations in the interval have tended to confirm and strengthen the neuron theory. In his earlier paper Professor Wilcox presented the hypnotic which best corresponded to the theory of sleep; and this he repeats in the present paper. According to this statement the theoretical hyypnotic should contain methyl alcohol radicles CH_3 and chlorine, and should be safe, reliable, and palatable. To the hypnotics mentioned in his Montreal paper he now adds Chloretone, and shows how completely it meets the theoretical requirements. It contains a double allowance of methyl alcohol radicles, a sufficiency of chlorine in the combination CCl_3 . Its safety has been proved; its reliability has been tested in a multitude of clinical observations; and, except for a temporary and not unpleasant flavor of camphor, it is perfectly palatable. In conclusion, the paper suggests the value of this preparation for the production of hypnosis, and refers incidentally to its antiseptic qualities as a local dressing, and its availability for the production of local anesthesia.

Acne Due to General Waste.

Mrs. B., a pale blonde of twenty-six, came to see me for a cachectic acne with which she had suffered for several years. Her nourishment appeared below par and she steadily and slowly decreased in weight, complaining of lassitude and a general feeling of being unable to get about as she should. She was given the regular treatment for acne which I am in the custom of using, but it did not seem to produce the desired effect. Deeming that an improvement in her nutrition and assimilation would exercise a beneficial effect upon her cutaneous trouble, I ordered the following: Cord. ol. morrhue comp. (Hagee), oz. xvi.

Sig. Tablespoonful after each meal and at night.

In one week she reported a net gain of four pounds and the eruption was in better condition, so much so that the effect of the cordial was patent. From inquiry, I elic-

ited the fact that the appetite had increased, assimilation was better and a general sense of comfort had replaced the bad feeling which had formerly prevailed. At the present date, three months after the inception of the treatment, my patient weighs twenty-six pounds more and is rid of her acne.

I have used Hagee's Cordial with uniform good results, and it is without doubt one of the best reconstructives now offered to the profession.

A. H. OHMANN-DUMESNILL, A.M., M.D.
St. Louis, Mo.

Nutrition in Severe Gastro-Intestinal Diseases.

Dr. J. E. Thatcher (Medical Century) states that in the care of patients suffering with malarial fevers, and especially children, there comes a time when the question of what food should be given becomes one of the gravest importance. In a case of this kind in a baby, 18 months old, in which extreme exhaustion existed after the subsidence of the fever, it was found very difficult to nourish the child, all food being refused or vomited. The case seemed almost hopeless, as the patient was apparently starving to death. A trial, however, was made of lacto-somatose given in a mixture of equal parts of oatmeal water and cow's milk, which was well tolerated without nausea or vomiting. Improvement set in from the moment of taking the first dose of lacto-somatose. The preparation relieved the gastric disturbances, stimulated the digestive organs, and created a natural appetite and the power to digest other food. Under its continued use perfect recovery ensued.

Treatment of Pyelitis.

In pyelitis, two indications present themselves for therapeutic solution: first, to render the urine plentiful and bland. Specially, to so medicate the urine with alternative remedies, that the inflamed pelvis may be gradually won back to a state of health. Cystogen in five grain doses added to a tumblerful of water several times a day will increase the volume of urine, render it germicidal and bland and prevent the formation of pus and of precipitation of uric acid, urates and phosphates in the diseased renal pelvis. This treatment ought to be continued without interruption until the urine becomes copious and the muco-pus has disappeared. The second indication, that which calls for administration of alternative remedies, is met by the use of such agents as *triticum repens* or saw palmetto in conjunction with the above.



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Metritis, Endometritis, Ulceration of the
Uterus, — Urethritis, Gonorrhœa, — Cystitis,
Ulcer of the Bladder, Etc.

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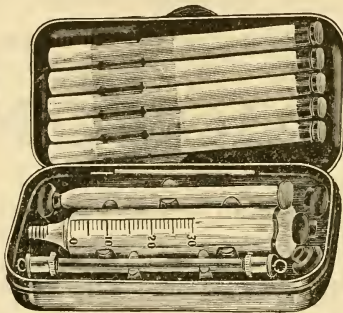
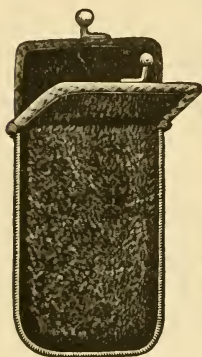
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The Anodyne Treatment of Acute Peritonitis.

McCaffrey ("The Etiology, Pathology and Treatment of Acute Peritonitis," 1899) observes that the most pronounced indication for treatment in peritonitis is that for the relief of pain. Blisters and counter-irritation, the older resorts, are practically useless. Hot water bags and poultices are far superior, but the relief they afford is only temporary. In some cases the ice bag is more grateful than hot applications. But whether heat or cold is employed, it should

be relied upon only until other lines of treatment can be instituted. Papine should be given in teaspoonful doses every hour, and the doses repeated frequently enough to afford the desired results. Relief from pain, short of narcosis, should be sought, and this is generally easily obtained by proper dosage. Papine does not produce nausea, but rather prevents this symptom. In the event of the development of more or less prostration, a proper stimulant, such as strychnine or nitro-glycerine, should be judiciously employed.—*Medical News.*

Becton, Dickinson & Co.'s Glass Aseptic Hypodermic Syringe.

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Give Circumference of body on line of Rupture. State if for Right or Left.

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Give exact circumference of abdomen at K. L. M. Goods sent by mail upon receipt of price. Safe delivery guaranteed.

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SILK	THREAD	each
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C to E.	\$1.50	each
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A to C.	\$1.50	each

Give exact circumference in all cases. We allow for expansion.

G. W. FLAVELL & BRO.,

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What Fools We Mortals Be.

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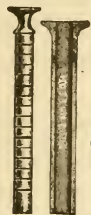
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No. 2.

Remarks on the Nature and Treatment of Corneal Ulceration.*

By Gaillard S. Tennent, M. D., Asheville, N. C.

The above title allows so much freedom that I shall endeavor to define the limits of the paper. In the first place, the remarks about the cornea and the origin of ulcers are mainly the results of observation and general reading, here laid down as an aid to the study of the subject, and while reliable enough, as far as they go, do not pretend to be a scientific array of facts.

Under the head of treatment, I have tried to give a working plan, consisting of a classification of the common forms of ulceration, interspersed with details of the most important local measures, only offering suggestions as to the line of general treatment, leaving the rest to individual judgment and skill.

From the sensitive and delicate nature of the cornea, and from its exposure to external influences, it would be natural to look for serious consequences to follow every injury by foreign body, etc. This does not occur, however; injuries, small and large, usually heal up promptly unless the cornea itself be defective in vitality, or the system be a prey to some dyscrasia.

It is true that all ulcerative processes are attended by bacterial action, that most of them are caused, directly or indirectly, by infection, still, in the vast majority of cases, there is something back of this, a tendency to break down, as it were an invitation to the invader to settle down and make his home in the corneal tissue. Of course, there are many exceptions to this rule, for instance, pneumococcus infection of a scratch or wound so small that it has been forgotten, from which develops the dreaded serpiginous ulcer, or tubercular infection of like nature, which gives rise to a very intractable form of ulceration. These and some other varieties are liable to occur regardless of predisposition.

In a perfectly healthy person the cornea acts very much like the skin, to which it is

analogous, and suffers no inconvenience from the germs that are constantly present in the secretions that bathe its surface. But in many victims of constitutional disease or defective cellular energy, corneal ulceration is the first warning of a departure from the normal standard of health. The resisting power of the healthy cornea is made further remarkable by the fact that it has no blood vessels in its substance, but draws its supply of nutrition through lymph channels (and these not regular lymph channels) and by absorption from the aqueous. For this reason a few words as to the structure of the cornea are admissible.

The superficial layer is only a modified continuation of the same layer of the conjunctiva; the middle or interstitial layers are continuous with the sclerotic; while the deep layers, known as Descemet's membrane, are derived from the uveal tract.

Hence, the superficial layer, being the continuation of a tissue well supplied with blood, possesses great power of resistance to the agents of infection. The interstitial layers are analogous to the poorly nourished sclerotic, and, while very tough and resisting to physical force, offer a fertile soil to the microbe. Finally, Descemet's membrane represents the vascular tunic and is so unyielding that the most corrosive ulcers often stop short at its surface and leave a staphyloma instead of a perforation.

The final result generally depends on the depth to which the ulcer penetrates; those confined to the superficial coat, though they may be as sluggish and as intractable as any, never leave a bad scar; those invading the intermediate layers are chronic, or become so before healing, and leave a denser cicatrix; those penetrating into the deep layers generally terminate in perforation with its resulting anterior synechiæ, fistula, staphyloma (if the surface be large), or else leave a very dense scar and irregularities in the curvature of the cornea which seriously interfere with vision.

The proper treatment and the prognosis depend to a great extent on the depth to which the ulcer has penetrated, therefore close and accurate examination with concentrated, artificial light, obliquely focussed is indispensable. He who diagnoses and treats corneal ulcers without using the concentrating lens, may be placed in the same

*Read before the Buncombe County Medical Society.

category with the man that has no use for the stethoscope in heart and lung disease.

Close observation is especially necessary when healing begins, for the vessels whose formation mark that event are sometimes faintly outlined and hard to make out.

This formation of blood vessels to aid in the repair of diseased tissue is one of the most interesting features in the whole connection. Nature in one of her kindly moods supplies the deficient nutrition and fights the invading bacteria in a most successful manner. A well known modern general used the same tactics successfully a few years ago. For sixteen years the Mahdi's tyranny was like a festering sore in Upper Egypt, and every army sent thither, a thousand miles from its base of supplies, was annihilated. Then Lord Kitchener built a railroad across a vast desert into the heart of the enemy's country, connecting base with operations, and crushed him in one short campaign. So an ulcer often hangs on for weeks or months till the system musters up enough strength and energy to run a network of blood vessels across from the corneal margin to the seat of the trouble. When this is accomplished, recovery is usually prompt and effectual.

Before taking up the treatment there is one point to be dwelt upon that already has been mentioned. With few exceptions, those suffering from corneal ulcers are the victims of constitutional disturbance, and the proper diagnosis and treatment of this causative element are often of more importance than local treatment. In children the cause is generally to be found in scrofula, hereditary syphilis or malnutrition, and it is not always an easy matter to decide to which class the case may belong. In adults the primary cause is harder to find. The negro race is especially liable to an indolent form of ulceration that apparently has no connection with syphilis, hereditary or acquired, though it yields readily to alterative treatment.

Aside from complicated cases and assuming that the constitutional defect be understood, it is not hard to devise a rational and effectual line of treatment. Still, this does not always resolve itself into the simple procedure adopted by many, namely: the insufflation of calomel or application of yellow oxide salve to all ulcers alike.

There is, however, one thing that may be done, unless specially contraindicated, as the first step in the treatment, no matter what be the nature or cause of the ulcer; that is, the administration of a mercurial purgative. This will often have more effect in relieving the pain, congestion and photophobia in an acute case than any other

measure. Besides the depleting effect of the purge, the mercury seems to influence the eye for good. Further measures than this depend on the nature of the exciting cause and on the conditions present.

The disease as commonly met with in childhood and youth presents some distinctive features, making a separate class as far as treatment goes. At this time of life constitutional causes are always at the root of the trouble, and the ulcers group themselves into the three following classes:

- 1st. Strumous ulcers.
- 2d. Phlyctenular ulcers.
- 3d. Ulcers from defective nutrition.

The first variety, strumous ulcers, may or may not begin as phlyctenules, and they are characterized by the amount of infiltration surrounding them and the rapid formation of vessels across from the margin. Notwithstanding this, they often hang on for weeks before getting well. The administration of the usual antiscrofulous remedies internally is indicated, though some cases in which there is no trace of hereditary syphilis, respond immediately to simple mercurial treatment. It is in this class of cases that the yellow oxide ointment is a *sine qua non*. Healing ought to begin as soon as the effect of the systemic treatment is felt, and no other local measures are usually necessary. Sometimes when the yellow oxide seems to fail as a stimulant, and the case drags on, the ulcer may be scraped and an antiseptic or stronger stimulant applied.

Phlyctenular ulcers are more intractable especially the marginal ones. In dealing with them the constitutional treatment is governed by existing conditions; tonics and reconstructives, in some instances, alteratives, are needed and often a long course of treatment, with regulation of diet and country air will be necessary. Local measures are also important. The lid margins may become inflamed and crusted; the crusts should be removed with warm water and soap, and silver solution in strengths from 1 per cent. to five per cent. applied. As a stimulant to the ulcer, the same procedure as in the other class; if this does not suffice, the cautery as a last resort.

In the third class are included: 1st. Small central ulcers, superficially located, with sharp edges and little or no infiltration, and, 2d. The grave condition found in anæmia, profound inanition or wasting from disease.

The central ulcers are painful and require the instillation of atropine, morphine or both, beyond this, no local treatment is usually necessary. The bowels should be

carefully regulated, and the diet changed to one of fresh meat and vegetables rather than the starches. The internal medication consists in the administration of tonics and iron.

The cure in the grave form, of course, depends upon the renewal of assimilation or the multiplication of blood corpuscles, as the case may be. The whole cornea is often involved, and the infiltration is deep and may be attended by hypopion (pus in the anterior chamber). Such serious conditions are back of this malady that the outlook is hopeless as a rule; even in event of improvement in the general symptoms, cauterization or Saemisch's section may be necessary to check the erosion and prevent rupture.

There are some points, applying to the cases just gone over as well as to adult life, to be elucidated before proceeding to classify the forms of the disease as found in adults.

Cleanliness is of prime importance here as in ulceration elsewhere, and is easily achieved except in the cases of those of filthy habit, those whose work takes them into the dust and in the painful ulcers of childhood, attended by blepharospasm.

In ordinary cases frequent bathing with boric acid solution or borax water is sufficient. The eye should be banded after scraping or cauterizing and kept so, if possible, till healing is well begun if the unfavorable conditions above noted exist. Blepharospasm in children is sometimes so hard to overcome that immersion of the face in cold water is the only way of opening and washing the eyes.

There is little difference of opinion as to the utility and method of scraping above referred to. I have adopted the following simple method: I first instill a four per cent. solution of cocaine, repeat after an interval of ten minutes, after waiting another ten minutes the ulcer is attacked. If it be superficial and extensive, I simply scrub it with a mop of cotton on an applicator. If it be deep or only covers a small area, I scrape it with a spud, using a sharp one or blunt one according to the nature of the margin. After this I apply a 10 per cent. solution of protargol or a 1 or 2 per cent. solution of silver nitrate. The use of pure carbolic acid is advised, but I have had no experience with it, nor with tinct. of iodine, which is of real value in keeping an acute case from lapsing into a sluggish one.

The actual cautery, while its use is limited, is the most valuable remedy in connection with ulceration in the adult. It is used for two different purposes, to destroy the

germs and detritus in an acute and rapid process, and to do the same and further act as a powerful stimulant in the sluggish cases not benefited by more lenient treatment. If used at all it should be used thoroughly, the edges of the ulcer especially being destroyed. If the ulcer be small, a platinum wire enlarged or flattened at the end, and heated to redness in an alcohol flame, is all that is necessary, but where the process is extensive, the electro-cautery must be used on account of the greater ease and rapidity with which it can be applied.

A great deal of care should be used in the preparation of yellow oxide salve. It may be made in strengths varying from one to four per cent., and it is a good plan to incorporate a few drops of olive oil in the prescriptions, but a druggist who will use plenty of elbow grease is of more importance.

Another point of special interest where the diagnosis is difficult, from lack of experience, poor facilities for observation or other cause, is the application of a stain. Either toluidin-blue or fluoresceine may be employed, though the toluidin-blue in solutions from 1-50 to 1-10,000 is more easily prepared for use. These agents will only stain the portion of the cornea that is denuded of epithelium, and they are valuable where pain, photophobia and lachrymation are the only recognizable symptoms of suspected ulcer.

Regarding the general treatment, of course, the acute cases and those from disturbance of the nerve supply require special measures, so do many others arising from recognized disease, but the majority of the sluggish cases, in which no special malady or defect can be traced, do better with a thorough course of mercury than with any other medication.

The iodides may be given in these sluggish cases, but iodine is one of the two remedies, often prescribed in ulceration, that have to be used with extreme care when there is an acute inflammation attended by congestion and lachrymation. Eserine the other, is seldom or never indicated in ulceration of any form, though its use is advocated by high authorities.

Atropine should never be used as a routine treatment; it is only to be used in some acute cases, where pain is great, where the iris is implicated, where there is danger of a central rupture. Pain may be controlled usually by the instillation of morphia sulphate, 1 per cent. solution, rather than by the use of cocaine. The analgesic effect of the cocaine is too fleeting, and it too often causes exfoliation of the epithelium to be used for any length of time.

Most of the cases ordinarily seen will fall into one or other of the following groups:

1st. Acute, progressive ulcers, superficial or deep.

2d. Chronic or sluggish ulcers, including the tubercular form, generally attended by interstitial infiltration.

3d. Ulcers dependent upon or attended by disturbance of the nerve supply.

This last class together with some other infrequent varieties will not be discussed at length.

Of the acute variety, the serpent ulcer is the worst form; it progresses rapidly with a deep, undermined edge, and is frequently attended by hypopion. It should be scraped, touched with a 2 per cent. solution of silver nitrate, and the eye bound up; if it be still progressing rapidly on the morrow, it should be cauterized; if it be stationary or better, the silver solution or tincture of iodine should be applied daily. Another form is sometimes seen, in which the whole epithelial layer peels off in a few hours or a day or two. In this case the whole surface should be brushed over with a swab of cotton soaked in a 10 per cent. protargol solution or weaker silver nitrate solution. The pain is frightful, and it has been advised to follow the above process by the use of a salve containing: Aristol, gr. iii; orthoform, grs. v, and lanoline, dr. j. A small amount of this salve is placed in the conjunctival sac and the eye bandaged. It is claimed that this will give absolute relief for twenty-four hours. I have not had enough experience with it to confirm this.

Another acute ulcer, less severe than the preceding, but productive of some pain, is crescent shaped and occupies a part or the whole of the margin of the cornea. At first it is simply a roughened ring, but in a few days blood vessels cover it, and there is moderate pain. No local treatment is usually necessary, healing taking place soon after the administration of some strong tonic, strychnia or arsenic. Morphia solution may be instilled for the pain, if necessary.

A majority of all the cases may be placed in the next class. This comprises chronic ulcers varying from those decidedly progressive to the indolent cases that show no change from month to month. These may be superficial, but usually they involve the intermediate layers. The alternative treatment spoken of above is the remedy. Local measures are to be regulated by the obstinacy of each individual case. Sometimes the simple application of yellow oxide salve effects a cure, but oftener resort has to be had to scraping and stronger stimulation. Tubercular ulcers seldom yield to anything

less heroic than the hot wire, while occasionally cases occur that even thorough cauterization fails to cure, here time with its changes alone can tell the result.

One point to be remembered is the importance of continued treatment whenever the interstitial layers of the cornea are involved, especially in the strumous and phlyctenular ulcers of childhood. After one attack the patient is never safe from recurrence, even after a lapse of years. Use of yellow oxide salve should be persisted in for months to aid in the absorption of the opaque scar, and in some cases renewed each spring for several years to prevent recurrence.

The point mentioned above of absorbing the nebula is a study in itself and will not be touched upon here.

In conclusion, the most important features of the treatment may be emphasized by repetition. Begin the treatment, especially in acute cases and strumous children, with a mercurial. *Find the cause.* In children and in most adult cases, judicious internal medication is of more importance than local measures. Mercury has the widest application internally, and next to it, tonics and reconstitutives.

Local measures consist in:

- 1st. Preservation of cleanliness.
- 2d. Relief of pain.
- 3d. Application of mildly stimulating remedies.
- 4th. Scraping with an application of stronger stimulants and antiseptics.
- 5th, and last, Cauterization.

DISCUSSION.

DR. J. H. WILLIAMS.—Not having been appointed respondent to the doctor's paper, I have given but little thought to the matter and shall have to speak from every day experience.

The doctor has covered the points in the pathology of corneal ulceration and left but little to say on that point. It is quite up to date and shows a familiarity with the leading authors of the day. The points left open in the doctor's paper are mainly those that refer to the various modes of treatment. In what practice I have had in the treatment of these cases I have generally regarded all phlyctenular ulcers of the cornea as belonging to the herpetic class, due to some disturbance of the nerve supply, and my treatment is directed most especially to that. In all cases of suspected syphilitic origin I believe in the thorough use of the mercurials systematically and locally, and have had considerable success in the local use of the amorphous yellow oxide suspended in glymol. The tonic I

have found most useful as a general tonic is arsenauero—Barclay—and if syphilis is suspected or proven by the treatment, follow with mercuauero—Barclay. Both of these are proprietary remedies, and though as a rule I am averse to the use or recommendation of any such remedies, yet I must say that I have found a great deal of comfort in the use of these.

I have not for a long time used the actual curetting or scraping. Some years ago my attention was called by Dr. Thompson to the use of a solution of pepsin as a cleansing solution in such cases. Lately Fairchild has introduced a preparation called Engymol, which is a thorough antiseptic preparation of the peptic principles and appears to be the ideal thing. I use when necessary the actual platino cautery. I have used with success the galvano cautery, but my experience with storage batteries has been disastrous and I have finally dropped it. Strict cleanliness and anti-sepsis must, of course, demand our attention. The constitutional treatment of such cases is of vast importance. I have not as yet had a case of true serpiginous ulcer under my care, nor have I had any experience with tubercular ulcers of the eye. I have had some cases of ulceration resulting from cerebrospinal meningitis, which, in the nature of things, was intractable. The blood dyscrasia, the profound disturbance of the nervous supply, and the generally lowered vitality of the patient renders hopeless all our efforts.

DR. TENNENT.—I have nothing to add except in regard to one thing Dr. Williams mentioned, that is, classifying all the phlyctenular ulcers together. Corneal ulcers are especially, hard to classify, and I simply made the arbitrary division to-night because there was so much ground to go over.

Etiology and Treatment of Laryngeal Phthisis.*

By T. P. Cheesborough, M. D., Asheville, N. C.

I will divide the etiology into predisposing and exciting causes.

PREDISPOSING.

1st. Heredity. There seems to be a tendency now, among most of us, to make light of heredity as a cause of Tuberculosis. I grant that it does not directly cause it, but it causes a tendency—a predisposition

to contract it—and, whether we inherit tuberculosis or inherit a condition that renders us unable to resist the tubercle bacilli, which is found every where, and which we are compelled to come in contact with, it seems to me to amount to the same thing, and it is shown clinically, beyond a doubt, that we do inherit this diathesis. Therefore, I place first among the predisposing causes, heredity.

2d. A pre-existing pulmonary phthisis, (and nearly all of the tubercular throats that we see are found in patients suffering with phthisis pulmonalis) the bacilli during expectoration coming in contact with a part of the larynx, from which a portion of the epithelium has been removed.

3d. Chronic catarrh, exposure to cold and damp irritating atmospheres

4th. The exciting cause is the bacillus of tuberculosis

TREATMENT.

About two years since, I read a paper before this Society on Catarrhal and Tubercular Diseases of the Throat, in which I urged the use of the curette and lactic acid (Krouse's treatment) in the treatment of all tubercular ulcers of the larynx, where the general health of the patient would permit its use. I stated then that lactic acid applied to a healthy mucous membrane had no effect whatever, and I believed that the failure of many of us to get good results, was due to this fact. There are circumscribed tumor-like infiltrations, found in the posterior walls of the larynx, that are covered with healthy mucous membrane and which show little tendency to break down, and unless this healthy mucous covering is removed, the lactic acid cannot reach the diseased tissues, and, as I said above, does no good. Many of us here treat a large number of tubercular throats, and the object of this article is to give, as far as I am able, a report of the progress made in the treatment. There is a tendency among many of us to treat all catarrhal and tubercular throats in the same way. A patient comes to us with sore throat, is hoarse and coughs, &c. We spray his throat and post nares, mop it out, or paint it and give inhalations, and in this way, relieve temporarily the acute inflammation, and the patient feels better and comes again. In many cases that is all that is necessary, but in many we are wasting time. Now we come to the question, which cases require surgical treatment and which ones should not be interfered with. Many good men do not believe in surgical interferences in any case, claiming that general tuberculosis too often follows. Yet these same good men do not

*Paper read before the Buncombe County Medical Society, June, 1900.

hesitate to scrape out a tubercular ulcer in any other part of the body. So why not here?

In an article written by Dr. Murray, of Washington, D. C., a few years since, title, "A Contribution to the Study of Laryngeal Phthisis," he mentioned several authorities and their views on this subject as follows:

Krouse believes that even in far advanced cases where there is high temperature, we can give ease to many cases by curetting and using lactic acid, and he adds: Do not be afraid to cut deeply into the tissues when necessary, because the patients bear it well.

Capart agrees with him and says that even in the very last stages, it should be done when we can give ease to the patient.

Castex believes that this treatment should only be used when the general health is good and when medical treatment has failed to do good.

Herryng, who has reported many cases, supports this method of treatment and suggests the following condition as indicating the necessity of surgical treatment:

1. In all tubercular tumors of the epiglottis.

2. Tumor-like infiltration of the posterior walls of the larynx, which shows little tendency to break down.

3. Chronic tumors resting on an inflamed base, surrounded by proliferating products which resist all treatment.

4. In partial diseases of the larynx when epiglottitis, lateral ligaments and false chords are affected.

He advises against operation in

1. Advanced phthisis pulmonis with hectic and wasting.

2. In diffused miliary tuberculosis of larynx and pharynx.

3. In all cachectic conditions.

4. In severe stenosis of larynx, caused by swelling of the affected parts. In these cases he recommends tracheotomy as soon as possible.

Gleitsman advises curetting

1. In primary tubercular diseases of the larynx without pulmonary complication, or where the disease of the lung has been arrested before softening took place.

2. In all circumscribed ulcers and infiltration.

3. In all dense, hard swellings in the arytenoid regions, posterior walls and ventricular bands, and in tubercular tumors of the glottis.

4. Where there is distress and dysphagia from infiltration around the arytenoids.

He advises against it

1. In advanced pulmonary disease with hectic.

2. When the disease of the larynx is so disseminated as to leave little or no healthy tissue.

3. When there is stenosis from extensive infiltration, and here he recommends tracheotomy.

Lenox Brown considers the curette necessary to obtain good results from lactic acid, but considers it chiefly useful in removing hyperplasia and to scrape away necrosed tissue. Chromic acid and pure ichthyol have been applied to the surfaces after the necrotic tissue was removed, and good results obtained from both after lactic acid had failed.

From a close observation and careful study of the methods of treatment of some of our best authorities and the writer's practice, I will sum up the treatments in the order I give precedence to.

1. The general health of the patient must be closely watched. Give tonics and digestants when necessary. Give large quantities of nourishing and easily digested food. Insist upon well directed exercise and plenty of fresh air in a climate that agrees with that particular patient. Among the innumerable drugs that have been employed, creosote has stood the test, and when carefully and properly administered, is of value in every case of tuberculosis. Begin with a few drops and increase the dose daily until patient begins to suffer from some gastric disturbance. Then go back to the few drops and gradually increase the dose again. Nearly every patient can take creosote if properly administered. (Ichthyol and guaiacol have been used with good results.) In the local treatments, I use alkaline and antiseptic washes to thoroughly cleanse the nose, posterior nares and throat, and I follow this by inhalations of glymol with menthol and camphor, or iodoform and ether and numerous other drugs that I find soothing to the patient. Where there is an irritating cough that prevents sleep and inflames the larynx, an anodyne should be used. In many cases this is all that is necessary, but in a large percentage of cases, unless we resort to the curette and lactic acid, we accomplish little permanent good.

My method is to first curette and then begin with a 30 per cent. solution of lactic acid and rub it in thoroughly, and increase its strength gradually until the full strength is reached, if necessary. It is often necessary to use a local anesthetic before curetting.

Laryngotomy, laryngectomy and tracheotomy in certain cases are of undoubted value, but should be resorted to only in the most exceptional cases. I have tried several

of the various anti-tubercular serums, but have failed to obtain good results.

DISCUSSION :

DR. WILLIAMS.—The doctor has, in his paper, treated rather hurriedly some of the points in the etiology of tuberculosis of the larynx. As to his position as to whether tuberculosis of the larynx is primary or secondary I did not quite catch. My opinion is that we have no case of general tubercular or profound tubercular infection of the larynx that is not accompanied with or in most cases, preceded by a general tubercular condition—that the tuberculosis of the larynx in the majority of cases is secondary to the general tubercular infection. We have cases of tuberculosis of the larynx that originate from tubercular infection of the appendages of the pharynx; the lodgment of tubercular bacilli in the crypts of the tonsil glands, the infection spreading from these glands downward to the epiglottis and thence to the pharynx by continuity of tissue. I shall have to pass rapidly to the mode and method of treatment, because that is what more particularly concerns us just now. We have no known method of preventing infection of the larynx when we have a case of tuberculosis except by the cleansing of the upper respiratory passages from day to day with antiseptic washed and the application locally of antiseptic sprays, including iodoform, upon which I place my main dependence. When we come to the treatment of tuberculosis of the larynx we must first consider the condition we may have present. Have we a condition simply of infiltration, or have we a condition that follows this infiltration, that of necrosis? In the primary stages of infection of the larynx with tuberculosis we have first an infiltration, notably in the region of the arytenoid eminences and the ary-epiglottic folds and the cellular tissue behind the false and true chords with tubercular deposits; we have a narrowing of the chink of the glottis; we have interference with the action of the muscles; we have an inability on the part of the patient to approximate the vocal cords, hence we have our hoarseness and indistinctness of speech. Afterwards when we have a condition of necrosis, of ulceration which extends by contiguity to the epiglottis, we have then an interference with swallowing, and with this comes a grave danger, the interference with the nutrition of our patient. Up to this point it does not alarm us, but when the complete closing of the epiglottis is so disturbed that chink of the glottis is not closed we have then interference with swallowing, and the

patient cannot swallow liquids and is confined to more solid foods. Then begins the general decline of the patient. Then comes the necessity for active surgical interference. It has been my rule in the treatment of these cases to thoroughly anesthetise by cocaine the larynx and pharynx, in order that I might be able to use instruments with a greater degree of facility, with less disturbance and distress to the patient. It has been my mode of treatment to thoroughly curette all ulcerated and breaking down and points of necrosis. It has been my practice afterwards to follow, in accordance with the suggestion of Dr. Gleitsman, formerly of Asheville, but now of New York, with cauterization with tri-chloroacetic acid. I fancy I have gotten better results than from the application of lactic acid. I think, also, that I get less pain and less distress afterwards. After I have cauterized I use a spray of iodoform dissolved in ether. After a few moments' rest to the patient I use another spray of iodoform dissolved to saturation in glymol. I then use this saturated spray of iodoform from day to day until I find curetting or a second application of my caustic is necessary. As to the cleansing of the larynx, I have tried to use peroxide of hydrogen, but I found that interfered very largely with the anæsthetising effect of my cocaine and of late I have used in addition to the cocaine a solution of supra-renal extract. I find in deep curetting I have a considerable amount of hemorrhage which can be prevented by the prior use of the supra-renal extract, but if I use the peroxide of hydrogen the effect of the extract seems to be neutralized. In order to relieve the pain that follows after the application of any of the cauterizing applications, I have found exceeding comfort to the patient in the use of powdered orthoform, applied directly with a powder blower, and in abundant quantities, and in the treatment of the ulceration and infiltration of the epiglottis that application of orthoform will free the patient for several hours from pain and distress, so that in an hour afterwards the patient is able to take a pretty square meal. Lactic acid has no effect upon the mucous membrane of the larynx until we have a condition of necrosis. The application of lactic acid anywhere from 20 to 40 or 50 per cent. has no appreciable effect upon the deposit until after necrosis has taken place, and after that lactic acid will do its work, I use to-day with increasing confidence in its efficiency ichthyol, applied in its pure state on a swab of cotton, applied directly and well rubbed into the parts affected. I have no comfort out of ichthyol sprays and

things of that sort, but I apply the ichthyol undiluted. All of the treatment of laryngeal tuberculosis must be backed up by our general treatment, and if we are enabled by the use of the serums, or any other method, to improve the general condition of nutrition of leucocytosis by which the tubercle bacilli is attacked; if we can bring about this condition of affairs we then shall have made a long stride towards the cure of tubercular laryngitis. Laryngeal complication is the most grave feature of the case, and unless we can control this laryngeal trouble, unless we can put the patient in a condition that he can take food, our case is hopeless. For long years I have made it a practice to use a stomach tube or gavage in the feeding of all patients in whom the laryngeal condition is such that they can not swallow freely and fully, using peptonized milk, malted milk, highly concentrated broths of mutton and beef, with very great advantage. I have seen my patients who are absolutely unable to swallow a mouthful of water or milk take on flesh from day to day and gradually improve in flesh and strength, and the fighting power of their system so renewed by these things that they have finally, after their cases had seemed to be absolutely hopeless and incurable, received an absolute arrest of the trouble so that they were able to enjoy life for one or two years anyhow. That is the longest time I have had any of these cases under my observation. Just one word in reference to the use of antitubercular serum, antiphthisin and things of that sort. In a paper I read before this Society some months ago I stated that I had pinned my faith to the watery extract of Von Ruck. I have had no reason to change my opinion in the matter. I still believe I have gotten better results in cases of laryngeal tuberculosis from the daily hypodermic injection of large doses, so much so that I have got almost a reaction from the watery extract of bacilli. In this treatment Dr. Von Ruck has simply been following out the line of thought in which he has been engaged for a great many years. It was some four years ago Dr. Von Ruck confided to me, I might say, his theories and ideas in regard to the extraction of the toxic principles from the bacilli, with the view of producing in the body of the patient that personal antitoxin which would attack the bacilli in its habitat, and I think in an article I read before you at some later period I discussed somewhat the relative value of toxin and antitoxin in the treatment of tuberculosis, and stated that I had tried the antitoxins, and that I had become convinced that the use of antitoxin was not feasible,

in that the early and intermediate stages of tuberculosis we do not have a sufficient amount of toxin in the blood of the patient produced by the decomposition of the bacilli to produce in the patient that personal antitoxin. For that reason I believe that the introduction in the blood of the patient of antitoxin sufficient in strength to rouse the resistive forces of the patient itself will produce in the body of the patient that personal antitoxin which will accomplish a great deal of good. I do not pin my faith to any particular treatment of tuberculosis. The building up of the tissues of the body, the excitation of the resisting forces of the body all occupy our attention. In order to accomplish this we must resort, of course, to any and all foods that are especially adapted to these cases, as we know we must introduce into the body the largest amount of proteids under the very best hygienic and climatic conditions possible. When we have done all that, and when we have striven as earnestly and patiently as may be with our local applications to arrest the progress of the disease, we have done all that man can do and we may reasonably hope for a considerable share of success—not all cases of tubercular laryngitis are hopeless or incurable.

DR. SAWYER.—I have never had a case of laryngeal tuberculosis that needed curetting, so that I am not in a position to criticise curetting one way or the other. We have all had more or less experience with tuberculosis proper, and I would like to add just one word along the line of the watery extract. I have used it in a good many cases, and have found it gives me good results. Of course it is not a cure-all, and in some cases I find it does no good. In those instances, of course, we have to rely on something else if we can. I am very fond of the sprays in laryngeal troubles, especially those containing menthol, camphor, eucalyptus and iodoform. I also find it very acceptable in those cases where the stomach cannot stand iodoform. I have also used orthoform, and find that it is very good. I also use certain astringent sprays, aqueous solution, and one to which I am indebted to Dr. Williams, containing besides some astringent principles, peroxide of hydrogen and ichthyol.

One other thing I insist on is the shower bath every morning, to those who can stand it. I find it invigorates greatly, and some patients who come here so weak they can hardly get up stairs, after taking a mild shower bath, first of warm water and gradually cool it down with a good rub and a toddy afterwards, are markedly improved and their strength will increase very nicely

right along. Another thing which has given me good results is the use of the inhalers. In certain conditions in which the spray is not acceptable on the account of so much oil being gotten into the throat and swallowed, these inhalers are of great benefit. I have found several cases who could use creosote that way in quite strong solution, say 10 per cent., who could not use it any other way at all. Of course, as we all know, we have to look out for the general health. We have at all times to give cod-liver oil, though I am not much in favor of giving cod-liver oil. I believe in using it externally, but I think that a stomach which can stand cod-liver oil can stand almost anything; and if you give me a good strong stomach, good pulse, and not too high temperature, the case will be cured almost every time.

DR. REYNOLDS.—It is a very interesting fact to me that in nearly all cases of the tubercular laryngitis that nine out of ten merely indicate acute tuberculosis and a rapid progression of the disease. We can use almost any of the treatments indicated here this evening, but it has been my experience that they nearly all die, and it is merely an insight to the acute condition of the pulmonary tuberculosis. as Dr. Williams said, in nearly every instance, it is accompanied by pulmonary disease, although I cannot see why the tubercle bacilli cannot localize themselves in the throat alone as well as they can attack any other portion of the body. As far as serum treatments are concerned, I think and hope that they do a great deal of good when used in moderation, but it seems to me when you give a patient serum, water extract, or any other kind, and carry it to its direct toxic effect so as to produce elevation of temperature, fever, so as to produce hyperemic congestion, if it does anything it will merely add fuel to the fire, and kindle the disease which may be latent. As far as surgical treatments are concerned, I have had no experience. I cleanse the throat thoroughly and then use astringents, with no great success in any.

DR. DUNN.—I would like to say one thing. The use of lactic acid should be preceded by a thorough curetting. I would like to plead for the strong use of lactic acid, and not its frequent use. Where we use lactic acid the use of the curet is quite as much indicated. Reference is made to the use of the culture products. Those who have had the greatest experience with culture products will tell you without exception that the proper use of those lies in giving as large doses as possible without getting fever reaction. The extracts of tuber-

cle bacilli and the culture products should be in no wise confused with antitoxins. If anything, they are toxins. As for the use of antitoxins, of course my idea is that they are contra-indicated.

A discussion why would be a long one, and I do not think it wise to go into that matter.

DR. JORDAN.—From the commencement down to the present I have been listening and learning, and so far as I can see, and certainly so far as I know, very little has been left unsaid. As for the doctor's lactic acid and curetting treatment, I agree perfectly, but there is one application that has been left off. It may be old, but it is certainly one of the most comforting things for a laryngeal throat I know, especially when it is in a painful state and the times come too close together for your application of lactic solution. It is a very weak solution of nitrate silver in the form of a spray. I use it constantly and get no bad effects, and it produces a semi-anæsthesia, if you could call it so, and at the same time you get a decided result in regard to your inflammation. After a throat is cleansed thoroughly, throw some of this in and afterwards use your glymol spray. You will find it brings the greatest comfort to your patient. Give it in a spray form in your atomizer, and more or less will penetrate the mucous membrane, and even if they should swallow it it does no harm, and it will certainly comfort a throat that is painful all the time for three or four hours, and that is a great gain in a tender throat. There was one point not brought up, that is in regard to the patient's circulation. It is absolutely necessary that a circulation should be kept up to a high standard from the very start. If you do that you will find your patient will improve daily. You can use your judgment about whether to use alcohol, strychnia or digitalis, but I know if you watch that point carefully you will get more improvement by 25% than you will otherwise.

DR. WOODCOCK.—I have never done any surgical work at all. I use the spray some with by-chloride solution one to 10,000.

DR. CHEESBOROUGH.—So many things have been said that I will not go into details in replying. I did not go into the general health of the patients in my paper, but I think nearly everything that was mentioned in this thorough discussion has been covered by my paper. There are one or two points, however, Dr. Williams said we have no case of tubercular infection of the larynx that is not accompanied or preceded by a general tubercular condition. I have a case of lupus of larynx under treatment where there is no pulmonary tuberculosis.

I think Dr. Sawyer brought up the point about iodoform. I find it very disagreeable to a majority of patients and use it very little. The doctor spoke of the point where they cannot swallow liquids. That is brought up by a German doctor, (whose name I have forgotten) and he recommends where the patient cannot swallow to have them lie on their stomach on a couch, with their head low, and take liquids through a tube. I have tried it in one case with very good results. I only mention the anti-tubercular serum. I have tried several and found no good results. Bishop, in his work, quotes Paul Paquin's serums (which Paquin claims to be the same as Fisch's). Paquin reports 293 cases treated by Paul Paquin serum; recovery 57, considerably improved 36, improved 121 disappeared from observation 41, deaths 38. Bishop further says there is an oxygenated serum tuberculin in San Francisco attended with like results. I have used it in a great many cases and have never seen any good results. As to Dr. Von Ruck's watery extracts, I have never had any direct experience, although I have seen several cases he has treated. I do not know the condition of the patients before he treated them. They were not well when I saw them. Bishop says they reported adversely in the last Congress to Kock's anti-tubercular method of treatment. As I said before, it would take too long to go into the various treatments. As far as the circulation goes, that comes in the general treatment of the patients.

At the conclusion of this discussion Dr. Charles Jordan reported a case of purpuric urticaria.

The Treatment of Infantile Anuria and Retention in Adults.

By W. T. Parrott, Ph.G., M.D., Superintendent of Health Lenoir Co.

In dealing with this very distressing trouble the physician is often placed at his very wits ends after all his "dead shot" measures have failed. In children the hot bath, if properly employed, rarely ever fails to give results, but sometimes this is outright failure and dry cupping over the lumbar region will act nicely.

Before giving the bath strong counter irritation in the inguinal region is of great importance. The method which I have used with the greatest satisfaction is a large emp. sinap. being used and removed short of blistering, the child is at once dipped into the hot bath at temperature of 100 to

105 F., pouring down the linea alba first hot water, suddenly changing to cold, at which time the bladder will be promptly evacuated. These rules closely followed will work admirably after the ordinary method has failed. In adults retention often assumes proportions more serious, and it is here that operative measures must be employed when catheterization fails and tapping contra-indicated as was in the case I am about to report.

Cocain while relaxing membranes beautifully should not be employed in the urethral track, as the hyperamia following it is sometimes so great as to make the original condition worse.

Chloroform should be given and patient placed with hips elevated on pillow, and if soft rubber catheter fails to pass by the usual manipulations then a small metallic catheter may be tried, although without any force whatever. I am not an advocate of the use of metallic catheters in the male urethra, as I find even with the most careful manipulation, damage to the delicate membrane is rarely ever escaped. Not so, however, in the female track where the curve is not so great. Where a soft rubber catheter fails to pass the flexible catheter may be used enveloped in a size smaller sound which can either be removed or the water allowed to flow slowly by and out of the catheter. In regard to tapping, I am an inveterate skeptic and more adverse to this procedure than the use of a metallic catheter. The danger of infection is great, and it often happens that it must be repeated so often as to merit little or no good.

I cite one of the cases in which the employment of this method would have been valueless and perhaps dangerous.

I. T., age 78; was called to see him July 5th, 9 P. M.; had not voided his urine in twelve hours, and under the influence of diuretics which had been taken before my arrival his bladder had been well filled. Diagnosis after careful examination: Enlarged prostate with partial paralysis. Catheterization failed outright even under chloroform, although the performance of which was carefully tried at intervals of two hours. Patient in extreme pain and $\frac{3}{4}$ gr. morphine was given under skin with the hope that relaxation might take place as the distension increased. Instructions were given to notify me at once upon his rousing. At 6 A. M. I was called hurriedly again, as the patient was in extreme agony. I called Dr. J. M. Parrott in consultation and we agreed that the trochar should not be used. The parts were quickly shaved and rendered aseptic and I soon had him under chloroform (catheterization again failing). We

preferred the supra-pubic operation to perineal section.

I soon had the patient under chloroform, and the operation which I have often known him to do for stone in the bladder was quickly finished. The patient recovered beautifully from the operation despite his extreme old age. We left in a drainage tube, and as the urethra could not be catheterized even as late as the tenth day I ordered a silver tube made numerous perforated at the base. This was put in and the wound allowed to grow up at its base, the stitches being removed. This formed a permanent vent. The tube was kept in until the forty-fifth day when catheterization was possible and he began to have voluntary control of the bladder. At intervals up to the time of removal of the tube he would pass some water, but as I threatened to take out the tube it would cease. The vent remained opened for several weeks, allowing the urine to leak through, but after following an irritant treatment a few days it closed up with scar tissue, and the patient was in my office this July, a year after, a hale, stout old man. It is interesting to note that on the sixth or seventh day the patient developed what first appeared a septic chill, but as there was no wound suppuration I suspected malaria, as he was suffering at the time of operation with a pronounced malarial cachexia. Chill showed tendency to recur on third day, but the fever promptly cleared up under quinia and arsenic, showing there was no wound infection.

CASE No. II.—Little Saidebelle—Age two. Called 9 A. M. Sick two weeks. Prostration very marked. Extremities cold. Lips much cyanosed. Fever 102—102½. Percussion revealed much distension of bladder, though the family claimed she had been passing her urine regularly. I ordered the bath, changing from hot to cold, when the urine was voided the tympany over bladder cleared up—fever reduced and prostration gone. She had evidently been retaining a surplus of urine each time, though apparently she was passing it freely. Upon tonics her general condition cleared up, and had no further trouble with retention.

There are another class of cases I have observed occurring in chloramiac women with no other perceptible cause other than the anemia. It is strange but true that these recover very nicely under iron and strychnia. The former being given as an alumnate after meals, the latter before.

In retention of cystitis I have little confidence in constitutional remedies, depending entirely upon local treatment, though I

am friendly to the alkaline diuretics—Benz. of Sod. and Boric acid combined with Pot. being the best accessory treatment. A hot solution of boric acid thrown in the bladder daily with the Valentine irrigator giving the best results.

CASE No. III.—Mrs. K.—Sick in June. Had been suffering twenty-four hours with retention. Fever 104. Perspiration profuse. Nervous system almost collapsed. Cyanosis great. Heart and lungs normal. Much pain in bladder. Diagnosis inclusive of history given—Cystitis—Catheterization at once done removing all the urine and injecting hot boric acid solution which at once cleared up the symptoms, and the injections continued daily she is making very satisfactory progress aside from a deep malarial cachexia which retards the direct treatment somewhat.

CASE No. IV.—Mrs. M., age 38, called to see her first in April. Heart and lungs normal. Careful analysis showed no sugar, not a trace of albumen, though the urine was scanty, and the presence of any in the bladder caused intense pain, and upon catheterization if there was no boric acid left in the bladder there was no good done thereby. Acute stage passed off within a week, and by following an alkaline diuretic with the irrigation tri-weekly she only has an occasional retention.

In retention from stricture I do not believe in operative measures, as any cutting of the urethral track only forms scar tissue, which if great forms an occlusion which is in itself a stricture.

CASE No. V.—Called in office in February suffering violent from retention. Gave history of the wheel-house operation having been performed a year previous and old stricture removed. After an hour's patient work I succeeded in passing soft rubber catheter.

Prof. H. C. Valentine of New York related a case of stricture to me which he worked on six hours trying to introduce catheter, and after dilating the stricture first with filiform bougies he gradually went from smaller to larger until the catheter was finally introduced and the urine voided. When the stricture is large the filiform bougie can be passed and left in as a capillary drain. I do not believe in tying in a catheter and leaving, as the damage done to the urethra is great and the bladder is so often infected.

In retention due to stone I consider the crushing operation unscientific and productive of very great harm, and the Suprapubic operation must not be shunned. There are another class of cases of retention not due to the bladder or kidney, and for a

time harass the physician for a diagnosis, and that is a defect in the center of micturition. There are a number of cases who apply for treatment and cases diagnosed "Incurable" when if this important place was treated then the trouble would yield, although like a good many other affections of the nervous system it requires a good deal of hard, honest work to diagnose such a condition. The treatment here is the galvanic current applied daily with large doses of strychnia. In phimosis, of course, the only treatment is to slit up the prepuce, circumcise, and, if necessary, do a meatotomy.

CASE NO. VI.—Infant. Seen July 23d. Suffering with retention. Had marked symptoms of stone in the bladder. Inguinal glands much swollen, and great pain upon urination. Examination of meatus could not be made owing to the phimosis. The prepuce was slit up and the meatus found almost occluded. Circumcision was done by the Valentine method and followed by meatotomy, and the case promises a speedy recovery.

I have endeavored to report a few of the more common cases of retention, hoping that the remarks upon some will be of service in this a most common and harassing condition.

Report of a Case of Double Mastoiditis— Operation—Recovery.

By Geo. F. Keiper, M. D., Lafayette, Ind.,
Eye and Ear Surgeon to St. Elizabeth
Hospital, St. Joseph Orphan Asy-
lum, Indiana State Soldiers'
Home, Childrens' Home,
Etc, Etc.

Chas. G., aet. 32, cook at the Indiana State Soldiers' Home, had been suffering from the grippe for a couple of weeks, when he called in Dr. E. C. Davidson, of our city. Upon a careful examination of his condition the doctor found both ears discharging pus abundantly. Both ears stood at right angles with the head and both mastoids very tender to the touch. The patient had been suffering very much. The suffering was with difficulty controlled by morphine. The doctor desired that the writer be called in consultation, which was done, and after carefully considering the patient's condition and symptoms, we decided that his best hope lay in an operation upon both nostrils. Both ears showed Dench's sign, a localized tumefaction of the posterior superior canal. He consented

to this and the doctor very kindly turned the case over to the writer.

Though very sick, he was brought from the Soldiers' Home in the police ambulance, a distance of four miles, through a black night, over roads rough because of heavy rains, to St. Elizabeth Hospital. Arrived there at 11 P. M., not any worse for the experience through which he had just passed. Preparations were made for the operations early the next morning, which was now the morning of April 18th, 1900. He had been given a calomel purge as soon as arriving the night before which moved his bowels freely before put upon the operating table. Both mastoid process were shaved for a distance of three inches around the tips. He was given as good a bath as possible under the circumstances, the head was carefully sterilized. At 9 o'clock the operation was begun under ether anæsthesia upon the right mastoid with the kind assistance of Drs. Davidson, Throckmorton, White, Westfall, McMahon, Hupe, and the others, whose names now escape my memory. The regular incision was made, beginning at the tip of the mastoid process and extending upward until it ended about an inch above the superior attachment of the auricle to the skin of the head. Another was made at right angles to this, beginning with the top of the first incision extending one inch from frontal bone. This permitted the auricle to be pulled forward and well out the way of the proposed field of operation. The periosteum was loosened and pushed out of the way. The bone being bared, a half inch trephine was applied close to the posterior margin of the bony canal and within and below a line drawn tangent to the superior margin of the bony canal. After giving a few turns it became very evident from the non-resistance offered that we had dead bone to deal with. Upon withdrawing the trephine pus welled up from the margins of the trephine button and the hole made by the pin of the trephine. The button was knocked loose by the chisel and mallet and the operation was continued by removing every vestige of dead bone and pus with the aid of chisel and mallet, rongeur, gouge and sharp spoon. It seemed that we could remove almost all the back of his head from the way in which we found pus and dead bone. The antrum was easily entered, the aditus cleaned out with a very small curette, the middle ear gently curetted and a stream of water put into the mastoid opening made its way out through the external auditory canal. After having satisfied ourselves that sound bone was reached in all directions, the wound was packed temporarily, the table was

turned and the operation was begun upon the left side in the manner as briefly outlined above. Pus and dead bone were discovered in abundance, but the quantity of both was only about half of what was found upon the right side. In passing the author desires to state that no attempt has been made to describe in full the details of the mastoid operation which now is so well known, but only to note the points of interest not usually found in the ordinary operation. The wounds were packed and the head dressed. He was put to bed at 11 o'clock. His pulse then was 80 and his temperature 98. At 4 P. M., he complained of pain in the back of his head, which was relieved by a hypodermic injection of morphine sulph. gr. 1-4, and atropia sulph. gr. 1-50. At 11 P. M., the pulse was 80, temperature 101. Pain was again present in the back of the head, relieved by a hypodermic injection like that given at 4 P. M. He had had at intervals clear tea, six ounces in all. His pulse was always good. He did well until 6 o'clock the next day (April 9th) when the temperature went up to 101½, the highest it had been. The pulse was good at 88. He was given broken doses of the calomel preparation called cal-lactore at Dr. Davidson's suggestion, who was asked by the writer to continue with me in attendance upon the case. A suspicious blush began to appear in front of the ears. At 1:20 o'clock midnight the temperature was 102 deg. Partial paralysis of the right side of the face was noticed for the first time. There being none previously, we concluded that the wound was packed too tight. Removal of the dressings and repacking the wound gently, caused disappearance of the paralytic symptoms. After a free purge with the calalactose, assisted by sulphate of magnesium, his temperature went down to 98.3-5 deg. at 7 A. M. The temperature remained fairly well down until 7 P. M., when it was again 102. The blush was still present and extending the wounds, which had now been dressed twice, looked suspicious. We had surgical erysipelas. Whence it came we cannot say. Immediately he was transferred for safety sake to a new room in a distant part of the hospital which had been as sterile as possible. Pure ichthyol was applied to the affected area, including the depths of the wounds frequently, and he was given tincture ferric chloride 30 drops every 3 hours. Quinine bisulph, 3 grs. every three hours was used. The bowels were kept open and the hypodermic injection of morphine sulphate as needed for pain. The erysipelas continued until April 20th, when it subsided and bothered him

no more. From that time on the recovery has been uninterrupted until now he is able to resume his work. The left wound is almost filled up. The right one will probably leave a considerable depression behind the ear because of the very large quantity of dead bone removed. The principal interest attaching to this case is the variety of the condition. Very seldom does the surgeon have the unique experience of operating upon both mastoids simultaneously and rarely does it happen to have a patient in such a low state recover so promptly with erysipelas as a complication.

Pyosalpinx.

By F. R. Millard, M.D., San Diego, Cal.

Is pyosalpinx the constant and terrible menace to life that our cousin, the gynecologist, says that he believes it to be? It can cause the woman an immense deal of misery, and she will often pray that she may die, and though her doctor may have the patience of Job and the meekness of Moses, he will sometimes think amen. A good many people also believe that if one has the shingles on both sides of the body at the same time and the eruption crosses the median line the patient is sure to die. Won't some gynecologist give us the statistics showing which of these two conditions has caused the greatest number of deaths? It is conceded by all who have given attention to the subject, that pyosalpinx is relatively much more frequent than it formerly was, and we are told that the reason is that the festive gonococcus has taken advantage of all the modern modes of rapid transit, and so its distribution is more general than it formerly was, and that the sequence is gonorrhœa, salpingitis, pyosalpinx, and there will be no decrease in the frequency of its occurrence until the general doctor ceases to meddle with venereal patients, and promptly turns them over to the specialist for treatment. The reason given may account for the increased number of cases of gonorrhœa, but does not account for the relative increase of pyosalpinx over gonorrhœa. My observations have convinced me that during the last half of the century this relative increase has been at the lowest three hundred per cent.

The conclusion drawn throws all the blame on the general doctor, and he must bear a part of it. But why does he not cure these patients? There was a time when he did so, and then the gynecologist was not, because there was but little need for him. Then the doctor sold his birth-

wright, and need increased, and as always happens when the need became pressing the want was in a manner supplied. For some thousands of years the trade in which Esau sold his birthright for a mess of pottage has been quoted as the typical fool's bargain. But when the doctor sold his birthright Esau stock went up relatively 100 per cent. To match the folly of the modern doctor Esau should have pulled the greens and then traded his inheritance for the privilege of standing outside of the tent and seeing Jacob cook and eat them. It was a sad day for both doctor and woman when he sold his birthright to cure for the privilege of treating his patient. With what he called true scientific humility, he proclaimed it his mission to treat the patient, and was rewarded with the cap and bills, and the privilege of seeing the patient pass him by and go to one whose mission it was to cure. Not content with the award, he declared it his duty to scientific medicine to teach the laity to make a distinction between curing a disease and curing one who is diseased, and was rewarded with the bauble and the motley, and the privilege of struggling from dewy morn till dusky eve to avoid being buried under an avalanche of pills, or drowned in that flood upon which the laity he has educated rely to cure them of that tired feeling, to which he, too, would succumb if he was not buoyed up with a lively hope of soon welcoming a new trade marked synthetic from Germany that shall help him to clutch success with one hand and sheekles with both. But while the doctor fared badly the trade, the woman fared worse. In the basic nature of things there does not seem to be any anatomical reason why a specialist should not be able to hold more than one idea in his brain at a time. But if you catch ten of them as they run, nine of the ten will be possessed with the idea that it is his mission in life to kill every toxin-forming microbe on sight, and he points to the cure of ague by quinine as the ideal toward which he strives. He is forced to admit that there are germs which he cannot kill without killing the patient, and when he dares not do that he must be content to adopt treatment that will inhibit their increase, and decrease their toxicity. Diphtheria is in this class, and if we had not been told we would never have known what a wonderful advance. Past all wonder this theory is beyond the old time theory that diseases were devils, and that some devils could be driven out, and some must be fed on dainties of which they were found until they went to sleep, when they could be caught and cast out. It has been proved that there is

no devil, so we cannot talk of killing the devil again. But we can give him the mellifluous cognomen malarial plasmodium, and then courageously cure our patient. If science and truth are one, then we would be just as nearly scientific to call administering the curative serum to a diphtheria patent, feeding the diphtheria devil, as it is to call it giving diphtheria antitoxin. It may be anti to something, but it is not to the toxin formed by the Klebs Löffler bacillus. If it was it would require a larger amount to cure an adult than to cure a ten-year-old child. While the truth is, it requires more to cure (not kill) the child than it does to cure an adult, and like all toxins, it requires both absolutely and relatively more to kill the adult than it does to kill the child. The gonococcus belongs to a different class, and if he is not a real devil he must have been made to devil the microbe killer. He locates in a place so easily accessible, and can be killed by so many germicides that do not immediately kill the patient that few specialists can resist the temptation to attack him with vigor.

There are few if any who will say that the opinions of Bummin, of Basel, as to the treatment for gonorrhœa are not worthy of serious consideration. He condemns the early vigorous use of germicides, but does not frankly doom his belief in feeding the clap devil, but says that he prescribes "balsam copaiba on empirical ground, not because it is an antitoxin, but because I so often get such surprisingly good results." In justice, it must be said, that some have receded from the advanced position once held, that there was no safety for a woman who had a pyosalpinx except by the removal of both tubes, and recently one of them wrote "The more extensive becomes our acquaintance with tubal infection, the more firmly are we convinced that even pyosalpinx when properly treated may subside and leave the woman, so far as her symptoms are concerned perfectly well. Of course, it is not conceivable that the tissues and organs can be restored to normal." It has often happened that a cœlotomist has closed his incision, leaving such extensive and firm adhesions that he dared not attempt to separate them, and at a subsequent operation the adhesions had all disappeared, though during the interval no treatment had been directed against them. If nature unaided can work this marvelous cure, it would be still more marvelous if when proper treatment was applied, the Fallopian tube was not sometimes restored to normal as completely as are other organs after a gonorrhœal infection. Two cases have convinced me that a functional

cure is possible. In the first, the woman had gotten a divorce because her husband had given her a gonorrhœa. The diagnosis was confirmed by a very careful general doctor. When treatment was ended she was told that if menstruation continued regular and painless for a year and she then wished to marry she could do so without there being any probability that the old fire would be rekindled, but that she could never again become pregnant. She remarried in less than a year and passed from my care. Two years later she come in to show me her three-months-old boy, and to taunt me for my lack of prognostic skill. This raised a doubt as to our diagnosis, and if the case had remained an isolated one the doubt would have remained.

Some years later a woman came bringing from a competent gynecologist a diagnosis of double gonorrhœal pyosalpinx. The left tube was the largest, but it seemed to me that a mistake in diagnosis would be inexcusable. After four months' treatment she one morning reported that about 4 P. M., she felt something give way in her left side, and that pus began passing through the uterus and by bed-time a teacupful or more had passed, and that the lump in her side was almost gone. Probably she overestimated the amount, but the tumor had much decreased and in a surprisingly short time there was no sign or symptom, objective or subjective, that there had ever been any inflammation within her pelvis. Treatment ended about the last of April, and I did not see her again until November, when she came in and said she had been regular until August, when there was a show for an hour or so, since which she had seen nothing. She had morning sickness, and after an examination was told that pregnancy was advanced probably between two and three months. The date of her confinement proved that conception took place before this show in August. Now no amount of vehemence of assertion can convince me that a mistake was made in the diagnosis of both of these cases.

After continuing for many years pyosalpinx may subside without any treatment, and the woman regain a measure of health. But this is not a cure, for vestiges of the disease can be found certainly for years after the menopause, and probably during the remainder of the woman's life. If communication between the tube and the uterine cavity can be restored and maintained a symptomatic cure is only a question of time and proper treatment. For a time the pus is retained in the tube by the swollen wall, and from time to time the obstruction gives

pus through the uterus accompanied or followed by a sense of relief. A bimanual examination will often cause a like increase, but is seldom followed by a sense of relief. If all these points of evidence can be elicited, success is very probable. If none of them can be elicited, that does not preclude the possibility of a cure, but it makes it more problematical. In order to get a cure mercurials are necessary, and it is not a matter of indifference which is chosen. My choice is the green and red iodids alternately. Give the green 1-4 gr. three times a day for a month, then the red 1-5 gr. with four or five gr. potass. iodid for a like time, and so alternate them until it is believed that the tube will not again become obstructed, when the green iodid is dropped and the red continued during the rest of the time treatment is continued. Locally, ichthyol and extract of belladonna should be continuously used. These are the essentials in all cases, while each case will call for general and local means suited to it alone. It is not easy for me to fix the exact place electricity should occupy in the scheme of remedies for this disease. I have used it a good many times with decreasing enthusiasm. In some cases it seemed of benefit, in others benefit was not apparent. However, it was one of the means used in every non-operative cure of which I have known, with a single exception, and my belief now is that if it pleases the woman it can't hurt the doctor, if it it pleases the doctor it won't hurt the woman, and if it pleases them both it alone will not cure her. When we think of the long time during which belladonna has been recommended to soften a rigid cervix and induce it to relax, and also to soften an indurated prostate gland, it seems strange that it is so seldom used in the treatment for pyosalpinx and allied conditions. The idea of using the extract of belladonna to expedite the removal of inflammatory exudates from within the female pelvis came to me from reading a paper printed in the *Edinburg Medical Journal* about forty years ago, in which the writer extolled it as the only drug that had any influence toward overcoming sterility of woman during the child-bearing age. He said that the extract to an amount that did not cause the woman real discomfort rendered her generative organs more succulent, as was evident both to the eye and the hand. It occurred to me that this condition of succulence would be favorable to the rapidity with which inflammatory exudates within the pelvis could be removed, and experience has proved that if we make a list of the drugs most useful for the treatment for pyosalpinx this will be

one of them. The doctor who expects to get equally good results by using atropin will be disappointed. When deciding what treatment is to be given the age of the woman should be considered. If it is thirty-five or more years a functional cure is probably impossible, and if a non-operative cure is got it will be at a much greater expense of time than if operation is done. If her age is twenty-five years or less a functional cure is sometimes possible, and if all of the conditions are favorable she should not be subjected to a mutilating operation until after a trial treatment of some months' duration. Theoretically, extra uterin pregnancy can be caused by a defect in the development of the Fallopian tube. Practically, all are caused by a former salpingitis. It is not so difficult to palpate the normal Fallopian tube as it is to palpate the normal appendix vermiformis, and this is done dozens of times every day.

If the time shall ever come, when every doctor can intelligently palpate the normal Fallopian tube and shall then subject every woman who has a salpingitis to a course of mercurials, iodids, ichthyol, and belladonna, the duration of the treatment depending on the intensity and duration of the inflammation. Extra-uterine pregnancy will then become the rarest of rare accidents, and section for tubal abortion be a lost art.

An Anecdote of Surgeon-General Sternberg.

Surgeon-General Sternberg, of the army, says that when he was going into the battle of Bull Run the Irish sergeant-major of his regiment came to him with a big bag of gold coin weighing three or four pounds and said:

"Doctor, I know that I'm to be kilt entirely, an' I want you to take care of this money an' see that it gets to the ould folks at home."

There was no time for remonstrance, or make any other arrangement, and, dropping the bag into the surgeon's lap, the Irishman hurried away to his place at the head of the column. All through two bloody days Dr. Sternberg carried that bag of gold with his surgical instruments, and it was a burden and embarrassment to him. He tried to get rid of it, but couldn't find any one willing to accept or even to share the responsibility, and he couldn't throw it away for the sake of the "ould folks at home."

Toward the close of the second day the surgeon was taken prisoner. He lost his surgical instruments and his medicine case, but clung to the gold, and making a belt

of his necktie and handkerchief, tied it around his waist next to his skin to prevent its confiscation by his captors. During the long, hot, and weary march that followed, the gold pieces chafed his flesh, and his waist became so sore and blistered as to cause him intense suffering, but he was bound that the "ould folks at home" should have the benefit of that money, and, by the exercise of great caution and patience, managed to keep it until he was exchanged with other prisoners and got back to Washington. There he found his regiment in camp, and one of the first men to welcome him was the Irish sergeant-major, who was so delighted to learn that the doctor had saved his money that he got drunk and gambled it all away the first night.—*Medical Bulletin*.

Sanmetto in Hematuria.

E. B. Gilbert, M. D., Ph. D., of Carbon, Texas, writing, says: "I used Sanmetto on a patient who had hematuria of long standing, and it gave the very best of results. The gentleman came back to my office about ten days after I subscribed Sanmetto for him, and said he had tried four doctors (naming them), and had gotten no good results, but that I had cured him. He being a very influential man, and I being a young physician, it has been worth quite a lot to me in the way of practice. I have on hand at present, three genito-urinary cases, who came to me for treatment, as a result of the success I had on that special patient, who would otherwise have gone to their family physicians."

W. A. Ward, M. D., New Edinburg, Ark., says: I have used Aletris Cordial in threatened miscarriage, in several instances with the best results; one case in particular, the lady was of nervous temperament and very easily excited, but by giving Celerrina combined with Aletris Cordial for a short time, she passed over it safely. I am of the opinion that any physician prescribing Aletris Cordial, in such cases as it is indicated, will not be disappointed in the result.

"Coca" has maintained its reputation as a powerful nerve stimulant, being used with good results in nervous debility, opium and alcohol habit, etc. The highly variable character of the commercial drug makes it uncertain however. Robinson's Wine Coca (see advertisement) we believe to be a uniformly active article, it being prepared from assayed leaves, the percentage of Cocaine being always determined by careful assay.

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SUBSCRIPTION. \$2-50 PER YEAR,

W. T. CHEATHAM, M. D.

Physicians throughout the State and elsewhere will be grieved to hear of the death of Dr. W. T. Cheatham of Henderson.

He was one of the leading physicians of the State and his going will leave a vacancy on the roll of sterling men. He was a valued member of the State Society and was its President in 1892.

After the shadows of the evening, after the stillness of the dark, the morning dawns.

ALEXANDER J. C. SKENE, M.D., L.L.D.

Dr. Skene died at his summer home in the Catskill mountains on the 4th of July, in the 62d year of his age.

He came of noted Scotch parentage and spent the first 19 years of his life in his native country. He graduated from the Long Island College Hospital in 1863, and served for a time as surgeon in the civil war.

For some time he was Dean and Professor in the Long Island Medical College, and wrote a number of articles on gynecological subjects. His text-book on Diseases of Women gave him a standing among the leaders of medicine. As a surgeon, he was original and his work brought fame and honor abroad as well as at home.

His latest work, Electro-Hemostasis in Operative Surgery, shows the genius of the man, and he dared to go into the untrodden fields with confidence.

MILITARY SURGERY.

Mr. Treves, from his experience in South Africa, has told us a good many things about bullet wounds and female nurses. Others will tell us more about the bullets, they may leave off the girls, and so the chapter on gunshot wounds in our new surgery will be entirely rewritten. The war in China, or the misunderstanding as the

Chinese minister calls it, the joke in other words, promises us more information on the same subject.

It is said that the slant of a Chinaman's eyes made it impossible for him to shoot accurately, but he has evidently learned to wink both eyes and can hit a foreigner point-blank at 1,000 yards.

Perhaps Japan opened their eyes so that all the slant was eliminated and they can now see on a dead level. At any rate there will be several bullet wounds to dress and learn about before we can laugh at the Chinaman's joke.

HOPELESS CASES.

As all must die, a quiet and peaceable death is desirable. But some physicians do all they can to prevent such an end. They chuck a dying man full of strychnine, slap a mustard plaster over his heart, or burn the bottoms off his feet with hot water and excite the whole community with senseless and useless doings.

In some cases, no doubt, this hullabaloo has a good effect upon the family and convinces them that the doctor is a great man, and that he never gives a patient up until he is dead, but to sensible people it is worse than the horrible noises of the heathen. Oftentimes some medication is needful even in the hour of death, but it should be given only to make the end quiet and easy. To squirt a man full of stimulants when the pulse has failed and the death damp is gathering on his brow, is to abuse the sacred calling for some selfish end.

In such cases the doctor is trying to bolster his own reputation rather than to sustain the sinking patient.

HOT WEATHER DISEASES.

Summer diseases and gastro-intestinal disorders are synonymous. Keep the stomach in shape and the germs that bloom in the summer will not do much harm.

Most people realize that they should eat less during the heated term, and they do eat less, because the appetite is less acute. But they make it up by eating trash and drinking icecold mixtures of various names. If there is a form of dyspepsia from drinking ice water, what do you call the condition resulting from the use of the various concoctions sold at the soda fountain?

Stale vegetables that were pulled before they got ripe, green fruit and sidetracked watermelons, these are the colic bug's friends. When people learn how to eat, the doctors will have to learn how to live without eating, as there will not be enough sickness to pay the grocer.

Left over meat from yesterday, it is too bad to throw away and so the butcher sells it as Western Beef, and the man who eats it wakes up the next morning feeling like he had been embalmed more than 2,000 years ago.

So if we do not eat as much during the summer as in winter we eat a greater variety of unnecessary things. Things that contain no nourishment to speak of and only serve as a sop to a disordered taste and perverted appetite.

Spiritually what comes out of a man decides his character, but physically what goes in determines his health and vitality, especially in the summer time.

During the hot weather the organ of ordinary sensation and feeling is the stomach.

VACATION TIMES.

People who work for their living should have a vacation once every year. No matter how exacting the work or how slim the pay. Millionaires can afford to work the year round, as they will not live much over fifty any way. But the man of moderate means and the poor toiler for his daily bread cannot afford to miss a regular vacation every summer.

Whether a man lives for many years or few after he is fifty depends upon whether he has worked his business or his business has worked him.

Suppose we take one month out of every year for rest and recreation from 30th to 54th years of our life. We have lost in that time two years from our work, but have gained 20 years for our life. So the net profit is 18 years of living. This will do for ordinary work and workers, but for a doctor—never. Leave town for a month? Why, some new fellow or old man will have all my practice when I return. How in the world can a busy doctor in the country give up his work for a month? These are the very folks we are talking about. They are the ones who must have a vacation, other people may.

Let the rushing city doctor go to some quiet country place, away from all consultations, and medical journals and night calls and mill accidents and forget he ever knew a thing called calomel, for a whole month, and when he comes back to his work it will be as a hungry man to his meal. As for his perpetual worker brother, he will eat him up before the third vacation. The country doctor is hard to manage, he can't find time to attend the State Society meeting once a year, and of course, he will take no vacation. So he gets in a rut, gets pessimistic, is mean to his wife and wonders

whether life is worth living or not. Now, my dear brother, you really want to do the best thing for your patients, for your family, for yourself. Then in heaven's name take a rest, a regular rest once a year. Good mellow wine is refreshing, life-giving, but if it turns to vinegar, the strongest digestion is upset. Don't get sour.

THE OUTSIDE INSANE.

During the conjoint session of the North Carolina Board of Health and the State Medical Society this subject was brought up and it was stated that perhaps 1,000 of these unfortunates were scattered throughout the State in jails, county homes and private families. This way of caring for these afflicted ones is not only expensive but absolutely lacking in any curative quality. It is a notorious fact that the jail poor house or private residence are, of all places, the most undesirable in which to treat or properly care for the insane, the epileptic or the idiot. And yet in these very places nearly 1,000 of the miserables are being made more miserables day after day at so much per head. The taxpayer can not plead lack of means, as the daily cost to the State is greater in such places than it would be in a well managed institution where they could receive proper care and special treatment. The initial cost would be greater in providing suitable buildings for this extra number, but if the cottage plan as suggested by Dr. Murphy, of Morganton, was adopted, the daily saving to the State would soon pay the cost of building.

It is inhuman as well as a waste of money to care for these people as we are now doing and the facts in the matter should be laid before the next Legislature for their serious consideration.

An epileptic farm can be made almost self-supporting, and at the same time the patient receive the greatest benefit from the treatment. As it is the mild cases must be kept at home until they are incurable, the violent ones are sent to jail where they beat out their poor lives, and the others are sent to the county home in which they find neither hope nor promise of better things.

In such places, now and then, one may recover, but it is in spite of his unfavorable surroundings, and lack of treatment.

The State has done and is now doing great things for her afflicted ones, but she can and will do greater things.

The management of the three institutions under her care is above criticism or reproach but there are others who demand her help and implore her protection.

SMALL POX.

Small pox is all over, past and gone, and the chickenhearted diagnostician is dead sure that he was right in his opposition to vaccination, as the whole thing was just a fool scare anyway.

But wait for the cold and frosty air and if you are not color-blind look out for the yellow flag.

Winter before last we had 616 cases in the State with 17 deaths, according to Dr. Lewis' report, last winter we had 2,806 cases and 65 deaths.

During the coming winter we may expect at least 12,000 cases with 250 deaths should it increase in the same proportion. And there is no reason why it should not.

Only ten per cent. of the people are vaccinated, the epidemic of last winter was scattered over more than half the State, the winter was mild, innumerable foci are everywhere about us and everything waits only for the coming of the cold weather of January 1901.

The State Board of Health has done a fine work in trying to educate the people in regard to vaccination, but the family physician has rendered null and void much of their teaching.

The average doctor can discourse very learnedly before a medical society on the supreme importance of vaccination and then go out in his private practice and act as if he thought it a monstrous fabrication. And if the strong advocates of this prophylactic measure only resort to it in the face of an urgent necessity, what can be said of the chicken hearted ones who call it varicella as soon as they come in sight of the house.

This unvaccinated 90 per cent. should be looked after, as they threaten the health and wealth of the community.

If we could only get up some kind of a report showing accurately the cost, in dollars and cents, of the two epidemics we have had, this 90 per cent. might be reached in part, otherwise they have no interest in the matter, though some will side with old Dr. Blank who made a diagnosis of chicken pox 20 miles away and proved it by his books and his experience in the war.

If we want to put down small pox in the State we must preach vaccination, vaccination for everybody from the negro cook to the grandmother.

BUBONIC PLAGUE.

According to the Chicago correspondent of the Medical News, in the weekly bulletin of the Health Department, Dr. Arthur R. Reynolds takes occasion to say that re-

cent developments in the plague situation fully warrant his action taken more than four months ago, when he urged the Surgeon-General of the United States Marine Hospital Service to call a conference of public health officials for the purpose of deciding upon uniform and co-operative measures for preventing the introduction and spread of the bubonic plague in this country. For the want of such measures the State of Texas has now quarantined against the city of San Francisco, and a large area of the country is in a state of alarm bordering on the panic which so often breeds shotgun quarantines in the yellow-fever zone of the South. It is to be feared that this is but the beginning of costly and vexatious interruptions of travel and traffic wholly unwarranted by any actual menace to the public health of the country. In the absence of authentic information, frankly published without suppression or concealment, disquieting rumors will gain currency; restrictive efforts will lack uniformity, and the efficiency to be gained by co-operation; business interests will be injured and the public mind will be so perturbed that the public health will suffer far beyond any probable results of the plague itself. What now remains for Chicago, as for every other community, is to set its own house in order; to spare no effort for that degree of civic cleanliness which, while making the spread of the bubonic plague impossible, will also improve the general health. More has been done in this direction during the past few months than in any spring period for many years, and Chicago is to be congratulated on the success of the efforts of individual citizens and householders for a cleaner city. The change wrought in the appearance of many alleys is a revelation. It is an object lesson which is being copied widely and gives promise of the complete abolition of the disease-breeding manure box and the equally obnoxious garbage box, illegal nuisances that are the cause of more avoidable disease and death than any other. When they are finally abolished Chicago will have no reason to fear the plague or any other pestilence.

BOOK REVIEWS.

Food for the Sick and How to Prepare It. By Edwin Charles French, M.D. Cloth. 172 pages. Price \$1.00. Louisville. John P. Morton & Co. 1900.

The doctor, as a general rule, is very careless about the feeding of his patient. He thinks his duty is to give drugs, and so he

delegates the food question to the old ladies of the neighborhood.

This is not as it should be, for in so many cases the feeding is in reality the treatment. This book by Dr. French is very timely, especially the chapter on *Food for the Baby*. In children at this season of the year the physician can leave his saddle-bags at home if he will post himself on the question of diet.

This work is arranged on a scientific basis and its careful study will not only make a man a good cook, but will make him a good doctor.

The diseases are taken up alphabetically and the foods suitable and those to be avoided are given.

The diet tables are from the best authorities with practical suggestions, so that it is possible to follow them in any practice.

Diseases of the Eye. By Edward Nettleship, London; Surgeon to the Royal London Ophthalmic Hospital, etc. New (6th) American from the sixth English edition, thoroughly revised by William Campbell Posey, M.D. With a Supplement on the Detection of Color Blindness, by William Thomson, M.D., Professor of Ophthalmology in the Jefferson Medical College, Philadelphia. Just ready. In one 12m. volume of 562 pages, with 192 illustrations. Selections from Snellen's test-types and formulæ and 5 colored plates. Cloth, \$2.25 net. Lea Brothers & Co., Philadelphia and New York.

This is the recognized standard of all the books on this subject. Six editions have been demanded in America and six in England and it is hardly necessary to say more on this subject.

But for the first time it has been edited by an American ophthalmologist. He has revised it thoroughly to date, adapting it particularly to the needs of American practitioners and students on those points where the views and practice of this country differ from those abroad. Especial attention has been given to methods of examination and therapeutic measures which have recently been largely employed here. Professor William Thomson has again revised his chapters on testing for color and sense and acuity of vision and hearing, now the standard accepted by railroads, and the Editor, Dr. Posey, had added the government tests for admission to the public service, army, navy and merchant marine, as well as the tests adopted by certain cities for school children. Sheets of test-types, colors and other means for detecting defects are also included. The book is a wonderfully compact and practical manual on

the eye, serviceable for every practitioner, student and specialist. It is fully illustrated and priced extremely low.

A Manual of Surgical Treatment. By W. Watson Cheyne, M.B., F.R.C.S., F.R.S., Professor of Surgery in King's College, London, Surgeon to King's College Hospital, etc., and F. R. Burghard, M.D., and M.S., (Lond.), F.R.C.S., Teacher of Practical Surgery in King's College, London, Surgeon to King's College Hospital, etc. In seven imperial octavo volumes, with illustrations. Volume III, 305 pages with 100 illustrations. Cloth, \$3.50 net. Lea Brothers & Co., Philadelphia and New York. 1900.

This is the third of the seven volumes which will constitute this manual of surgery. The authors are adhering strictly to their promise made in the first volume that they would pay especial attention to treatment, but would give the particular method which had proven best in their large experience. We consider this a most commendable feature of the work.

In reading an ordinary treatise on surgery we find any number of methods of treating the same condition and so in the practical application of what we have read there is confusion and uncertainty.

As a practical work on this subject this manual is unexcelled.

In this volume the authors consider Fractures, Diseases of Bone and Amputation and the consideration is complete in every detail. Croft's splint seems an ideal method in the treatment of fractures.

This work deserves the success which it has already attained and it will certainly secure a permanent place in the surgical literature of our day.

Simon's Clinical Diagnosis. A Manual of Clinical Diagnosis by Microscopical and Chemical Methods. For Students, Hospital Physicians and Practitioners. By Charles E. Simon, M.D., Late Assistant Resident Physician Johns Hopkins Hospital, Baltimore. In one very handsome octavo volume of 563 pages, with 136 engravings and 18 full page colored plates. Cloth, \$3.50 net. Lea Brothers & Co., Philadelphia and New York.

It is not very hard to treat a patient if you can only find out what is the matter with him. Three-fourths of the physician's work and worry is in finding out the real cause of the illness. To scale down this extra labor is the dream of the doctor. Show us an infallible sign of this or that disease and you have made life easier for the physician. Simon's Diagnosis goes a great way in this direction. Three editions of this work have been called for in the past

four years and it has certainly satisfied a long felt want. The clinical laboratory is as full of possibilities as it is of test tubes, and this work shows that many of them are becoming established facts.

The author takes up the blood and puts it through a searching examination in health and in disease. This is followed by saliva, gastric juice, feces, sputum, urine, udates, cystic contents, cerebro-spinal fluid, serum, vaginal secretion and milk.

The book is handsomely illustrated, printed and bound in first-class style.

Atlas and Epitome of Special Pathologic Histology. By Docent Dr. Hermann Durck, Assistant in the Pathologic Institute; Prosector to the Municipal Hospital, L. I., in Munich. Authorized translation from the German. Edited by Ludvig Hektoen, M.D., Professor of Pathology in Rush Medical College. Cloth, 158 pages, 62 colored plates. \$3.00 net. Philadelphia. W. B. Saunders, 925 Walnut St. 1900.

This is the eighth volume of Saunders' Medical Hand Atlases and the success of the undertaking is now assured.

These volumes have already appeared in nine different languages.

In this volume, as in the others of the series, the best talent has been utilized to produce the most elegant style and the price places them within the reach of all.

Dr. Durck takes up the circulatory organs and the gastro-intestinal tract. The importance of pathologic anatomy is not second even to normal anatomy and all the real advance in clinical medicine must be along this line.

To all workers with the microscope this work is invaluable. The plates are numerous and finished in the best manner.

The lithographing is such as we are accustomed to see only in very high priced works. The illustrations are all drawn from actual preparations and the most typical pictures of the various processes are shown as they really appear.

The plates carry 129 different pictures.

A Manual of Operative Surgery. By Lewis A. Stimson. B.A., M.D., Professor of Surgery in Cornell Medical College. New (4th) and thoroughly revised edition. In one royal 12mo. volume of 581 pages with 293 illustrations. Just ready. Cloth, \$3.00, net. Lea Brothers & Co., Philadelphia and New York.

We all know Stimson's Operative Surgery and consequently it is only necessary to announce the appearance of a new edition. As a clear, concise, trustworthy

guide to the student and surgeon it stands among the first.

This edition has been carefully revised and rewritten so that it is up-to-date in every detail.

The illustrations have been carefully revised as well as the text, so that 40 cuts are omitted in the present edition, as having outlived their usefulness.

The chapter on Operations Upon the Cranium is as concise and practical as the busy surgeon could wish for and the diagrams make the text very clear. Plastic operations upon the face receives its full share of attention and is very complete as regards text and illustration.

Dictionary of Medicine and the Allied Sciences. By Alexander Duane, M.D., Assistant Surgeon to the New York Ophthalmic and Aural Institute. Reviser of Medical Terms for Webster's International Dictionary. Third edition, enlarged and thoroughly revised, with eight full-page colored plates. Cloth. 646 pages; square octavo. \$3.00. Lea Bros. & Co., Philadelphia and New York. 1900.

The purpose of the author, to give sufficient but succinct information concerning every word that the student or physician will be likely to meet with in the course of his professional reading, has been well carried out in the work before us.

Obsolete words have been dropped, but all words in use to-day will be found in their appropriate place with ample definition. The pronunciation is clearly and simply indicated so that one may see at a glance how the word is pronounced.

The illustrations are well selected and executed in the highest style of art.

In its new and revised edition this book strongly commends itself to the student and the practitioner for no matter what other books they have they must have a dictionary.

Clinical Examination of the Urine and Urinary Diagnosis. A Clinical Guide for the use of Practitioners and Students of Medicine and Surgery. By J. Bergen Ogden, M.D., Instructor in Chemistry, Harvard University Medical School. Assistant in Clinical Pathology, Boston City Hospital. Medical Chemist to the Carney Hospital. Visiting Chemist to the Long Island Hospital, Boston. Illustrated. Cloth, 416 pages. \$3.00 net. Philadelphia. W. B. Saunders & Co. 1900.

The examination of the urine is one of the most important aids in diagnosis and some of us do it in a very slipshod way, because we know no better. Urinary chemistry of our laboratory days we have forgotten, and our method is made up of scraps

of information picked up here and there in our reading. This method is not good for patients and is bad for our own reputation.

We should order this book without delay and find out a clear and easy way of doing the thing right.

It is divided into two parts. In the first clinic and microscopic methods are described in detail, and numerous illustrations, many of which are original, have been introduced, thus enabling the student and practitioner who have not had special training in urinary analysis to obtain accurate results.

In part two special attention is paid to diagnosis of diseases of the kidney and urinary passages and of certain general diseases of the body.

The publishers have gotten the work out in exceptionally fine style, and the book as a whole, is worthy of a liberal support by the active profession and by the teachers in our medical schools.

A Text-Book of Practical Medicine. By William Gilman Thompson, M.D., Professor of Medicine in Cornell University Medical College, New York City, Physician to the Presbyterian and Bellevue Hospitals, New York. In one magnificent octavo volume of 1010 pages, with 79 engravings. Cloth, \$5.00 net. Leather, \$6.00, net. Half Morocco, \$6.50, net. Lea Brothers & Co., Publishers.

With all the text-books on Practice there is still room for this one. It is true to its name—a text-book of *Practical Medicine*. Medicine has made giant strides in the past few years and this work presents a comprehensive review of the present status of medical practice. The advance along etiological lines has been closely followed by the author and the treatment is valuable when we consider the ripe experience of the writer. His long service as a teacher of medicine is shown by the easy manner in which even the dry facts are presented. The book is divided into nine parts. 1. Infectious disease. 2. Diseases of the Digestive system. 3. Diseases of the Spleen, Lymphatic System and Ductless Glands. 4. Diseases of the blood and Vascular System. 5. Diseases of the Respiratory System. 6. Disease of the Urinary System. 7. Diseases of the Nervous System. 8. Diseases of the Muscular System. 9. Miscellaneous Diseases. Poisons and Drug Habit. Diseases due to Parasites.

A standard work on the Practice of Medicine is the physician's compass and one will not miss his course if he follows the teachings of this book.

A Manual of Personal Hygiene. Edited by Walter L. Pyle, A.M., M.D. Assistant Surgeon to Will's Eye Hospital, Philadelphia. Cloth. 344 pages, \$1.50, net. Illustrated. Philadelphia. W. B. Saunders & Co. 1900.

In these days of prophylaxis, when we know how much easier it is to prevent than to cure, this book comes as a welcome addition to our knowledge on this subject. It is intensely practical from beginning to end, and should be read by every physician in the land.

The Hygiene of the Digestive Apparatus is discussed by Chas. G. Stockton; hygiene of the skin and its appendages, by Geo. Howard Fox; Hygiene of the Voocal and Respiratory Apparatus, by E. Fletcher Ingals; Hygiene of the Ear, by B. Alexander Randall; Hygiene of the Eye, by the Editor; Hygiene of the brain and nervous system, by J. W. Courtney; Physical Exercise, by G. N. Stewart.

Atlas and Epitome of Gynecology. By Dr. Oskar Schaeffer, Privatdocent of Obstetrics and Gynecology in the University of Heidelberg. Authorized Translation from the Second Revised and Enlarged German Edition. Edited by Richard C. Norris, A. M., M. D.; with 207 colored illustrations on 90 plates and 62 illustrations in the text; cloth, 272 pages, \$3.50 net. Philadelphia: W. B. Saunders and Company. 1900.

This hand book well fills in the space between the compend and the elaborate system. The line of treatment recommended is very conservative in most cases and for the average practitioner this is the very thing he wants.

The atlas feature is most commendable and the illustrations are well up to the standard set by the previous issues of this series.

The editor has performed his work with discretion and it cannot but prove most useful to the physician.

Atlas and Epitome of Diseases Caused by Accident. By Dr. Ed. Golebiewski, of Berlin. Authorized Translation from the German with Editorial Notes. By Pearce Bailey, M.D., 40 Colored Plates and 143 Illustrations in black. Cloth. 550 pages. \$4.00 net. Philadelphia. W. B. Saunders & Co. 1900.

This book fits right into a hole in medical literature. To some of us, who have read book reviews all our lives, there seemed to be no chink or crevice anywhere. But there was a vacant place, a need, and this work has come to fill it.

Especially to those of us who have to do in any way with accident insurance it is

very useful. In case of accident usually every doctor in town is called so all of us should read this book.

This hand-book should prove very handy for reference in case of a washout.

The Annual of Eclectic Medicine and Surgery, Edited by John V. Stevens, M.D., Vol. 8, embracing the papers and proceedings of the various State Eclectic Medical Societies for the years 1897 and 1898. 8 vo., 538 pp. Cloth, Price \$2.00. The Scudder Brothers Company, Publishers, Cincinnati, Ohio. 1900.

Our eclectic brothers show a good deal of enterprise in the volume before us. It is simply the best papers read before the various State Eclectic Societies for 1897 and 1898. Cuts of the various officers enliven the pages and relieve the monotony of the print.

The States are arranged alphabetically and the selection from matter in hand was very judicious, the whole making a very readable book.

LITERARY NOTES.

THE "NEW LIPPINCOTT" MAGAZINE FOR AUGUST, 1900.—The "New Lippincott" for August brings out William Le Queux's latest novel—complete in this number. "The Sign of the Seven Sins" is a story of love and mystery in high life on the French Rivers. The "Palace of Delight" at Monte Carlo, that spot of irresistible fascination, is conspicuous in the earlier pages. The strong plot compels intense interest until the clearing up of mysteries at Paris. Altogether the tale is so exhilarating that it is sure to find favor with summer readers everywhere.

Among the remarkably good short stories of the month, of which there are four, Seumas MacManus has contributed a jolly Irish sketch which is a guaranteed cure for the "blues." It is called "Two Cockneys and a Conspirator."

"The Way Benny Looked at It," by Rignald Banfield Chase, a new writer of marked originality, is a story of a woman's love for her husband which in its unselfishness is idyllic.

"Femme Dispose," by E. F. Benson, the author of "Dodo," is a most ingenious character study. An English nobleman's infatuation for "a woman of no importance," which is interrupted by the death of the young man's father and followed by an unexpected denouement, makes a story well worth reading.

"2620 Oxford Place," by Katharine H.

Brown, another newly "arrived" author, is a lively little romance connected with divorce, but in so hopeful a way that it is singularly refreshing. The scene is in Washington.

"A Swede's Campaign in Germany," by Stephen Crane, was written very shortly before his death, proofs which had been corrected by himself having been received a few days after Mr. Crane's funeral. This paper deals with the battle Leipzig in a manner that throws much light on South Africa.

Continuing the series on "American Belles," Virginia Tatnall Peacock has a delightful paper about "Theodosia Burr." There is a fine portrait of this handsome woman, who, with all the world against her father, could yet say she was "proud to be the daughter of Aaron Burr."

Contributions of verse are "August Guests," by Cale Young Rice; "Dawn in Midsummer," by Sara C. F. Hallowell; "Omar Khayyam," by Albert Charlton Andrews; "Dearest and Best," by Marie van Vorst, and "The Song of the Singer," by Arthur Ketchum.

The "Walnuts and Wine" department has clever stories, poems, and anecdotes, by Caroline Lockart, E. Hovey-King, Francis Churchill Williams, Reginald Wright Kauffman, P. C. Terry, Fred Rosslyn, and others.

The political campaign and the Chinese problem are the two most prominent topics in the August Review of Reviews. In "The Progress of the World," the editor analyzes the platform adopted by the Democrats at Kansas City. Among the contributed articles there is a brief review of the work of the Kansas City convention by Walter Wellman, followed by personal sketches of "Mr. Bryan at Home," "Theodore Roosevelt," by Jacob A. Riis, and "Roosevelt's Work as Governor." "The Chinese Revolution" is the subject of a well-informed and timely paper by Stephen Bonsal. Important phases of the situation in China are also set forth editorially.

The Journal of Surgical Technology is the title of a new periodical, to be published monthly, beginning July 1, 1900. It will be devoted to the consideration of the technic of surgical procedures, at a subscription price of \$1.00 a year. Valuable premiums are offered with the first subscriptions. Address the Technique Publishing Co., 404 East 14th St., New York City, N. Y., for sample copy.

The July Forum is of such even excellence that among the thirteen articles presented therein it is difficult to select any one as especially worthy of mention. If preference must be given we may name "Our Relations with Germany," by William C. Fox of the Bureau of American Republics; "Kiaochou: A German Colonial Experiment," by Hon. Charles Denby, Jr.; "Social Reform and the General Election" (in England), by Thomas Burke; "The Shipping Subsidy Bill," by the United States Commissioner of Navigation, E. T. Chamberlain; and "The Passion Play at Oberammergau," by Professor Hans Devrient. Other articles deal with the alleged increase of crime in the United States, the position of the United States as a world power, the real story of Hawaii, Chinese civilization, the advisability of entering the Government service, and the growth of American outdoor literature.

The August, Fiction Number of Scribner's Magazine, is always a notable one, both for its short stories and the unusual number of illustrations. This year it will be found especially rich in these particulars as well as in other features. The contents include the names of some of the best known writers of to-day, and, as usual, those of new contributions to the Magazine.

Excellent character sketches of both the Republican and Democratic Presidential nominees will be found in the American Monthly Review of Reviews for July. Dr. Charles B. Spahr writes of Mr. Bryan and the principles that he represents, while a friend of President McKinley tells of his personal traits and the record made by his administration.

Two of the freshest and most important of recent articles on China, namely, Mr. Gundry's account of "The last Palace Intrigue at Peking" and Mr. Douglas's hopeful view of "The Intellectual Awakening of China" will be found in The Living Age. Mr. Gundry's article in the number for July 7, and Mr. Douglas's in the number for July 21.

ABSTRACTS of the One Hundred Leading Articles of the Month.

Amputations.

W. H. Elliott, in the Railway Surgeon for May 15th, discusses this subject from the standpoint of the railway surgeon.

He advises conservative treatment of crushing injuries of the extremities.

He lays down the following plan of treatment:

First—Arrest the hemorrhage by elevating the injured parts, and ligature, torsion or compression of all bleeding vessels.

Second—Cleanse thoroughly.

Third—Replace parts, and, as far as possible, put the limb in a flexed and comfortable position.

Fourth—Cover the parts with sterilized dressings applied loose enough to allow for swelling.

Fifth—Maintain artificial heat to the limb and to the whole body till reaction is established.

Sixth—Relieve pain by morphia and stimulate the heart by atropia administered hypodermically, and sustain the vital powers by fluid nourishment, and perhaps the cautious use of stimulants.

He says that after the lapse of one or two days we can easily decide how much of the injured parts must be removed and how much there is a chance to save.

Alcohol as a Food.

The alcohol question breaks out in a fresh place every now and then. Professor Atwater threw a whole lot of kindling on the fire as the result of his recent experiments along this line.

W. S. Hall, in the Journal of the American Medical Association, gives some very good reasons why alcohol can not be regarded as a food.

The differential diagnosis between alcohol and food is well brought out in parallel columns as follows:

ALCOHOL.

1. A certain quantity will produce a certain effect at first, but it requires more and more to produce the same effect when the drug is used habitually.
2. When used habitually, it is likely to induce an uncontrollable desire for more, in ever increasing amounts.
3. After its habitual use a sudden total abstinence is likely to cause a serious derangement of the central nervous system.
4. Alcohol is oxidized rapidly in the body.
5. Alcohol, not being useful, is not stored in the body.
6. Alcohol is a product of decomposition of food in the presence of a scarcity of oxygen.
7. Alcohol is an excretion and, in common with all excretions, is poisonous. It may be beneficial in certain phases of dis-

ease, but it is never beneficial to the healthy body.

8. The use of alcohol, in common with narcotics in general, is followed by a reaction.

9. The use of alcohol is followed by a decrease in the activity of the muscle-cells and the brain-cells,

10. The use of alcohol is followed by a decrease in the secretion of CO_2 .

11. The use of alcohol is followed by an accumulation of fat through decreased activity.

12. The use of alcohol is followed by a fall in body temperature.

13. The use of alcohol weakens and unsteadies the muscles.

14. The use of alcohol makes the brain less active and accurate.

FOOD.

1. A certain quantity will produce a certain effect at first, and the same quantity will always produce the same effect in the healthy body.

2. The habitual use of food never induces an uncontrollable desire for it, in ever increasing amounts.

3. After its habitual use a sudden total abstinence never causes any derangement of the central nervous system.

4. All foods are oxidized slowly in the body.

5. All foods, being useful, are stored in the body.

6. All foods are the products of constructive activity of protoplasm in the presence of abundant oxygen.

7. All foods are formed by nature for nourishment and are by nature wholesome and always beneficial to the healthy body, though they may injure the body in certain phases of disease.

8. The use of foods is followed by no reaction.

9. The use of food is followed by an increased activity of the muscle-cells and brain-cells.

10. The use of food is followed by an increase in the excretion of CO_2 .

11. The use of food may be followed by accumulation of fat, notwithstanding increased activity.

12. The use of food is followed by a rise in body temperature.

13. The use of food strengthens and steadies the muscles.

14. The use of food makes the brain more active and accurate.

Air Embolism During Surgical Operations

In the Quarterly Medical Journal for May, J. Basil Hall describes a case of this

kind occurring during an operation for recurrent growth of the breast.

The mamma, together with the pectoral muscle, had been turned back according to Halsted's method, and a somewhat extensive mass of glands was being dissected out at the apex of the axilla. A small vein had been cut across, so insignificant in size that pressure forceps were not applied at the moment. A loud sucking noise was heard, precisely like that produced by a small puncture in the pleura. There were three distinct inspirations of air before the vein was clamped, as the patient was breathing rather rapidly at the time, the ether inhaler having just been reapplied after an interval for refilling it. Within a few seconds there was a sudden stoppage of respiration, followed by four or five inspiratory gasps; extreme pallor overspread the face, the pupils dilated widely; there was a slight tetanic spasm of the body and risus sardonius of the face. The pulse became fluttering and imperceptible, but the heart continued beating rapidly and tumultuously, whilst a distinct thrill was perceptible to the hand placed over the præcordium. The muscles relaxed, all respiratory efforts ceased, the heart beats became imperceptible and the patient was to all intents and purposes dead. The whole period, from first hearing the entrance of air to the final stoppage of respiration, was not longer than fifteen or twenty seconds. Artificial respiration was at once begun and vigorously carried out, whilst a large dose of strychnine was administered hypodermically. After an interval of a few minutes a spontaneous inspiratory effort occurred. This was repeated and eventually respiration was restored after a lapse of a quarter of an hour. The operation was then hurriedly completed. The patient remained in a somewhat critical condition for an hour or two, but ultimately made a good recovery.

Angioneurotic Edema.

In a paper read before the Brooklyn Society for Neurology, by J. M. Winfield, as reported in the Brooklyn Medical Journal for June, the pathology of angioneurotic edema was discussed from the side of the skin lesion.

He said that this disease interested the dermatologist as much as the neurologist, for patients were more apt to call on cutaneous specialists when afflicted with this disease, as it is essentially a skin disorder, the nerves playing only a secondary part.

After reviewing the descriptions of Quincke, together with some remarks on

the etiology of the disease, he reported three cases. The first was a female aged thirty-three who had had six or eight attacks of sudden swelling of various parts of the body. Search for the recognized etiological factors failed, but pelvic examination revealed an ovarian disease. Since operation for that trouble there had been no recurrence of the angioneurotic edema.

The second case was a male whose attack of circumscribed swelling was caused by excess of uric acid.

Third case, also a male, in whom the attack followed prolonged exposure to a cold rain storm.

In speaking of the histological examination of the skin the doctor compared angioneurotic edema to the other angioneuroses of the skin, as urticaria, etc. He said that the whole skin seemed to be involved in this edema, and there was hypertrophy of the tissues under the skin. The lymph vessels were dilated and the canals were lined with endothelial cells; the blood vessels, also, showed marked changes. On account of inability to histologically demonstrate the cutaneous nerves it could not be proven just what the nerve influence was that produced this acute swelling.

The doctor said that much credit must be given to Dr. Unna, of Hamburg, for demonstrating the changes in angiomatous swelling of the skin.

Cholecystectomy for Gall Stones.

C. L. Gibson, in the Medical Record for June 9th, reports two cases as illustrating when the gall bladder should be removed. He advises its removal in all cases of cholecystitis with or without stones, acute or chronic, provided that the gall bladder and gall ducts can be properly explored, and that the conditions promise an easy removal of the gall bladder. It is to be borne in mind that the more distended the gall bladder, the more likely is its separation from the liver to be easy. And provided that the common and cystic ducts (sometimes also the hepatic) are demonstrated to be free from stone, and that in addition to stone there is no other obstruction of the lumen of the common duct such as a tumor, benign or malignant, of the pancreas.

The operation is also recommended even when its performance is difficult or possibly entails a slightly greater risk in a limited class of cases—that is, when it is the only satisfactory way to deal with the gall bladder, and as a prophylactic measure against malignant disease in the presence of longstanding irritation.

If these various limitations receive a strict

interpretation, the number of cholecystectomies that are justified by the above indications will be comparatively restricted, and the operation will be done only under circumstances that permit of its greatest usefulness with a minimum of risk.

A Practical and Simple Method of Determining the Percentage of Hemoglobin.

In the Archives Generales de Medicine for April, quoted in Medicine for June, T. W. Tallquist describes a method of determining the amount of hemoglobin by direct observation of the tint imparted to a piece of paper. The drop of blood is received upon white filter-paper, and is then carefully compared with a color scale having ten different tints of red. In the article is a reproduction of this scale, which has been standardized by means of a Fleischl hemometer. The writer claims for the method extreme simplicity, adaptability for rapid clinical work, and at the same time nearly as accurate results as the measurement of the blood by the Fleischl instrument.

The Blood in Cancer of the Stomach.

William Osler and Thos. McCrae, in the New York Medical Journal for May 19th, give the result of a study of the blood in cancer of the stomach.

The study included the white and red corpuscles and the hemoglobin.

They feel justified in making the following conclusions:

In a doubtful case a blood count below 1,000,000 red blood-corpuscles is strongly in favor of pernicious anemia.

While nucleated red blood-corpuscles are present in all very severe anemias, megalo-blasts rarely if ever occur in cancer of the stomach.

Neither an increase in the leucocytes nor special variations in the forms appear to be of any moment in the diagnosis of cancer of the stomach.

The presence or absence of digestion leucocytosis is too uncertain to be of much assistance in diagnosis.

Cancer of the Breast.

The Halsted operation has been accepted as the proper operation for this condition, in which the glands are thoroughly cleaned out of the axillary space.

However, Thos. H. Manly in his clinical notes on a series of surgical cases treated during the past year, in Gaillard's Medical Journal for July, says that this is all a fallacy.

He prefers the simple incision as it may not show any return for years, and is comparatively free from danger.

His objection to the complete operation seems to be based on the result in one case in which the wide dissection was followed by widespread recurrence in three months. But one swallow does not make a summer. In the case mentioned if a wide dissection did not remove all the diseased tissue as shown by the rapid return what assurance has the doctor that a simple incision would have removed all danger.

If four freight cars break down under a certain load is it reasonable to suppose that the weight could have been more safely carried in a baby carriage?

Benign Stricture of the Rectum.

Louis J. Krouse, in the Cincinnati Lancet-Clinic for June, reports six cases of stricture located high up in the rectum.

He gives the following reasons why this canal is so often the seat of disease;

First, the fecal mass that passes through this canal is more solid than that which passes along either of the other canals.

Second, the fecal mass does not leave the body of its own accord, but is forced out, stretching the rectum and the anal outlet in its course through the canal on its way to the outer world; while the urethra and esophagus are never over-distended by the foreign bodies passing through them.

Third, the fecal mass often contains foreign substances (hard and sharp) which may injure the walls of the gut in their passage through it.

Fourth, certain diseases located in the lower gut, such as polypi, hemorrhoids, ulcers, etc., by their frequent tension of the part during each act of defecation, do exert a deleterious effect on the lining membrane of the gut.

Fifth, the fecal mass is usually voided once in twenty-four hours; frequently it remains in the gut for forty-eight hours; occasionally a week may elapse before its expulsion. A foreign body remaining so long in contact with a mucous membrane can hardly fail to produce some pathological alteration.

In his experience the stricture is not most frequently found near the anus, but usually high up.

In nearly 350 cases of rectal trouble, 20 were cases of stricture, two being malignant. Twelve were situated high up near the sigmoid flexure and beyond the reach of the finger and six were located near the anus.

Castor Oil in Neuralgia.

In the Journal of the American Medical Association for April 21st, Harold N. Moyes speaks very highly in favor of castor oil in facial neuralgia.

It is given in one to two ounce doses before breakfast. He recommends that it be taken in a glass of ale as the best way to disguise the taste.

The relief from pain is almost certain. He says that its good effect can not be explained by its purgative action as other purgatives do not have the same effect.

But no matter how it does the work just so it does it.

And so before resorting to extirpation of the Gasserian ganglion try castor oil in your next case. It's a bad dose but it's a bad disease.

Cervical Pott's Disease.

T. H. Myers presented a case of this kind before the New York Academy of Medicine according to the American Practitioner and News for March 15th.

The patient was a woman, 32 years of age. Her father had died of cancer. Otherwise the personal and family history was unimportant. During labor with her second child, three years ago, something had been felt to give way in her neck with persistent pain, which had not been materially affected by her third labor, one year ago, and had remained till the recent application of mechanical support. A dry cough had recently appeared. On January 29, 1900, when the patient was first seen, the chin rested on the sternum, with a marked kyphos at the fourth and another at the seventh cervical vertebra, some lateral curvature, marked reflex muscular spasm, and ability to rotate the head 45 degrees to either side. Pain prevented walking more than a short distance, and was severe at the sternum about the level of the fifth rib and in the left scapular region. There was no sign of abscess. The spine at the place of disease was unusually broad. The patient was losing ground in nutrition, pain, and deformity. A spinal assistant and chin-piece, the uprights being carried only a little below the level of the scapulæ, was applied and had already lessened the pain and deformity.

Cancer of the Uterus.

L. S. McMurtry, in the American Practitioner and News for March 15th, gives a rather discouraging report in regard to the value of hysterectomy in this condition.

During ten years he has performed hysterectomy 25 times for cancer of the uterus,

and only five of the patients are living to-day.

So he lays stress upon the prophylaxis and says that more operations ought to be done for lacerations of the cervix.

He advised the examination of women between 40 and 50 years of age who have borne children, and if a laceration is found it should be repaired.

Carcinoma of the Fallopian Tube.

A case of primary carcinoma of the fallopian tube is reported by Elizebeth Mercelis in the New York Medical Journal for July 14th. This condition is rather rare but the points in the diagnosis of this case is well brought out.

The determining points showing primary development were as follows:

The absence of malignant growth in the uterus, as shown by microscopic examination of curettings at the time of operation.

The presence of an old salpingitis, together with the freedom of the inner end of the tube from malignant change.

An enlarged tube, the lumen of which is filled with carcinomatous masses of even 25 centimetres diameter. This change found throughout two thirds of the tube, and with the existence of a pelvic tumor for more than fifteen months.

The advanced stage of the growth within the tube and fairly healthy condition of the outer muscle layer. This, in view of the resistance of the tube to secondary invasion from the ovary, and that such, when occurring, usually involves the peritoneal surface first, the mucosa secondarily.

Microscopical evidences of a more rapid proliferation of the new cells in the ovary than in the tube.

All of these forces us to consider the growth in the ovary of more recent development than the advanced coexisting tumor of the tube.

Differential Diagnosis of Some of the Rarer Manifestations of Syphilis.

The case of syphilis, that follows the routine course as laid down for it in the text-books, is not hard to diagnose, but there are many cases which refuse to follow this prescribed course and we are apt to fail in our diagnosis unless the case is carefully studied.

James M. Winfield, in the New York Lancet for July, discusses the atypical forms of this disease.

The primary lesion may be in several places, as about the lips or fingers, and the genitals be entirely free.

Enlarged glands may be present and yet the patient is free from the disease, especially in persons of the strumous type.

Again we may find the disease with hardly any glandular involvement at all. The eruption may not be macular or papular but altogether of a bullous type, resembling varicella or pemphigus.

At times it may be scaly, resembling psoriasis.

In the tertiary stage the diagnosis may be exceedingly difficult, as in this stage it may be confounded with lupus, epithelioma, tubercular disease or leprosy.

In treating obscure cases of any kind it is well to have in mind the possibility of syphilis, and only by a careful study of the disease can we hope to arrive at a correct conclusion.

Distilled Water as a Food

Ephraim Cutter in the Journal of the American Medical Association for May 26th, says that distilled water is good for man.

He does not mean distilled condensed in a closed reservoir but aerated, that is the distillate should have a fall of not less than two inches in the open air.

His conclusions are that water by itself or inhaled in the air passively and constantly is a food, indispensable to all mankind; that, if so, why feed "calculi" patients on waters which add to the already overloaded collections? That distilled water properly aerated is the best for such rheumatics and asthmatics; that if Germans have been poisoned by distilled water, it is a very remarkable idiosyncrasy in those who have figuratively more vitality, more strength and actually enjoy more rights than Americans; German patent medicines are used by American physicians largely, beneficially, undisturbedly, while cis-Atlantic patent medicines and appliances can not be employed by American physicians; that water is a solvent in biology; that the purer it is, the better will water wash out the viscera, dissolve calculi, ease the flow of blood through the more than 100,000 miles of capillaries in the system, promote osmosis, soften tissues, accelerate secretions and excretions, equalize all circulations, aid cerebation, cardiation, digestion metabolism; that distilled water is free from bacteria, yeasts, epithelia loaded or not with cryptogamic diseases; that whatever gets in from the morphology of the air of the kitchen can not be so deleterious as some aver, because the culinary queens inhale it all the time, harmlessly.

The writer hopes it will become the

fashion to "treat" people with distilled in place of undistilled water and spiritous liquors, as he found it appetizing, satisfying, going to the right spot, clean tasting and beautiful to the eye as well as the palate, wholesome and never intoxicating (toxa—poison) as our experience proves with the Americans and English, through Dr. Koppe asserts it has.

Endowment of Medical Colleges.

In his Presidential address before the American Medical Association W. W. Keen calls attention to the slim share the medical colleges get in the distribution of gifts of money. Hospitals are being endowed, colleges, museums, libraries are receiving liberal donations, but the medical schools look out for themselves as best they can.

In 1899, he states, 80,000,000 dollars were given away in charitable gifts and bequests and to other things than medical schools.

He realizes that medical schools run in the interest of the faculty should not hope to share in any bequest, but those that minister to the sick and afflicted by the higher education they give their graduates may reasonably expect a share in these gifts from the charitably inclined.

Medical education is very expensive and no branch of education stands in greater need of help.

Frequency of Rickets in Boston and Vicinity.

Somehow we never thought of rickets in connection with Boston, but J. L. Morse, in the Journal of the American Medical Association for March 24th, tells us that 80 per cent. of the poorer children, that is children from the poorer classes, show signs of rickets.

The following changes in the osseous skeleton were considered as evidence of rickets and were sought for in every case:

1. Increase in size of the frontal and parietal eminences.
2. Failure of the anterior fontanelle to diminish in size as rapidly as normal or to close at the usual time. The normal time of closure was placed at eighteen months; late, if anything.
3. Open sutures and craniotabes.
4. Delayed eruption of teeth. It was considered that an infant should have 1 tooth at 8 months, 2 teeth at 9, 6 at 12 months, 12 at 18 months, and 16 at 2 year. These figures are all rather later than the average.
5. Rosary. In order to avoid error only

those enlargements were considered as a rosary which could be felt both parallel and vertical to the long axis of the rib. Three grades were distinguished: slight, medium and marked.

6. Other deformities of the chest: *a*. Protrusion of the sternum. *b*. Retraction of sternum. *c*. Retraction at the insertion of the diaphragm and flaring of the lower chest.

7. Enlargement of the epiphyses at the wrists and ankles.

8. Deformities of the long bones of the extremities: *a*. Bow-legs. *b*. Knock-knees. *c*. Bowing of the arms.

Three other points were also studied as being important and common manifestations of rickets, although not diagnostic, as are the skeletal changes. These were:

1. Weakness of the spine. It was considered abnormal if the infant was not able to hold up its head alone at 3 months, and sit alone at 8. Marked general kyphosis—the curve of weakness—was also considered abnormal even if the infant could sit alone.
2. Marked enlargement of the abdomen.
3. Splenic enlargement. The spleen was considered enlarged only when it could be felt.

Four hundred cases were studied and only 82 showed none of the above signs of rickets.

The most common cause, he thinks, is improper hygienic surroundings.

From a careful study of the 400 cases he says that the following conclusions seem to a certain extent justified: 80 per cent. of the children under 2 years old, of the poorer classes of Boston and the adjacent cities, have rickets. A rosary is not a normal phenomenon but is an evidence of rickets. It is a constant symptom of rickets. It is the earliest symptom to develop and in 40 per cent. of all cases in patients under 2 years old, is the only symptom. The next most common symptom is delayed dentition. Other symptoms, while they may show themselves at any age, do not, as a rule, develop earlier than the tenth month. The cause of rickets in Boston and vicinity is to be found in improper hygienic surroundings rather than in race or diet.

Enthusiasm in Surgery.

There is too much enthusiasm in this branch of medicine, according to A. M. Vance before the Kentucky Medical Society as reported in the Journal of the American Medical Association for June 9th.

The operations mentioned as unjustifiable were the Kraske operation for cancer of the breast with great involvement; following the

lymphatics along the arteries in cancer of the uterus; buried suture of silver wire; Edebohl's examination of the kidney through the lumbar incision; prophylactic removal of the normal appendix to prevent appendicitis; circumcision, as an operation should never be done in the new-born except where good reason exists; ligation of abdominal aorta—twelve cases were found in literature with twelve deaths; forcible correction of Pott's disease; operation on Gasserian ganglion.

Myocarditis in Infancy and Childhood.

Attention is called to the close relationship between myocarditis and infectious diseases in infancy and childhood by Henry Koplik in the Medical News for March 31st.

He mentions several cases which show plainly the danger of this complication.

If, in the course of an infectious disease, we have attacks of faintness, pallor, vomiting, disturbed and very irregular heart action, a persistent distortion of the respiration and pulse ratio as in adherent pericardium, it is certainly significant, especially if these attacks have a tendency to recur. If examination of the heart shows extreme weakness of the first sound, or disappearance of its muscular quality, greater intensity of the second sound at the apex, with intensification of the second sound at the pulmonic orifice, we certainly in these have danger signals of greatest moment. If, in addition, as in pertussis, we have other signs of cardiac insufficiency, such as a slight systolic blow at the apex, edema of the face and extremities, pallor and cyanosis, disinclination to exertion, constant drowsiness, it would be certainly narrow, in view of our pathological and exderimental knowledge, not to entertain the possible existence of serious degenerative changes in the heart muscle.

The daily labor of the physician is at the bedside of the infant and child suffering from the infectious diseases. He may be unconscious of the fact, but the recovery of his patient will in the vast majority of his cases depend on the action and integrity of the heart muscle. His therapeutic methods must not simply reduce temperature, but in reducing temperature they must not compromise the utility of the heart in order that the patient may tide over the dangers of the illness. In all this we must foster the modern tendency of treatment which is to support the strength of the patient. The danger which hovered over patients who formerly were given large doses of depressant drugs can be appreciated, if we

believe what has been brought forward in this paper. As to the heart, we should never forget that it is fortunate that even in a degenerated organ we have healthy tissue on which our drugs and methods are supposed to act. We must not exhaust these healthy foci by overwhelming them with harsh measures of large doses of powerful drugs. Foster their strength rather. The areas of degeneration will not be aided by drugs, but must be healed; in time, possibly, there may be regeneration of new tissue. The hope of these cases then lies in well-sustained nutrition, carefully and persistently regulated.

Diphtheria.

J. B. White, in Pediatrics for July 15th, is inclined to doubt the efficacy of antitoxin in the treatment of diphtheria and rather pins his faith to intubation and tracheotomy. He is to be congratulated on the fact that his paper contains no table of statistics and we listen to his objections to antitoxin with better grace. Statistic tables can be made to suit any side.

Most of the men who are opposed to antitoxin are those who have never used it and so their objections are derived from theory and the daily papers, either of which is not a safe guide in the practice of medicine.

Gastric Ulcer.

According to the Denver Medical Times for July, W. T. Little read a paper on this subject before the Col. Med. Society.

The order of frequency of symptoms of gastric ulcer he places as follows:

Pain, vomiting, hemorrhage, tenderness, pallor, constipation, thirst. The pain, while nearly always felt in the epigastrium, frequently radiates to the back, down into the abdomen, into the chest, up to the esophagus and even to the back of the neck. pain may be absent. The time of vomiting is not a factor in diagnosis, for it may occur on an empty stomach, although oftenest following eating. Vomiting does not always relieve the pain.

Hemorrhage occurs in fifty per cent. of the cases. The mortality is greater in males and women recover more quickly. Death of females under thirty is rare. In suspected bleeding, the stools should be examined for haemin crystals. As to prognosis, forty per cent. are cured permanently and forty percent. relieved. Treatment: Rest in bed for not less than four weeks. Rectal feeding for one week in hemorrhagic and irritable cases. For the next two weeks the food by the mouth

should consist of peptonized milk, somatose, albumen water, stock, soups, with toasted cracker, puree, ice cream, etc. Later, scraped beef, minced breast of fowl, soft egg, toast and light desserts. A teaspoonful of Carlsbad salts in hot water is given every morning and repeated if there is hyperacidity.

Medicine, in his experience, has but little value, and time should not be wasted with it. After the dietetic and rest treatment have been faithfully tried and the ulcer continues, surgery is recommended.

Homan's Sign in Measles.

In the Medical Fortnightly for July 10th, Geo. Homan calls attention to an early sign in measles which appears earlier than Koplik's. This sign is the appearance of minute red points dotting the palpebral surface of the conjunctiva.

Their discovery was accidental, as he was examining a child's eye for supposed foreign body when these red points were seen.

The suffusion of the eyes, with coryza, sneezing, etc., are the earliest well marked symptoms of measles and it seems reasonable that the mucous membrane of the eye would be affected before that of the mouth. He says that further observation is necessary to clearly establish the value of this sign.

Hot Air in Rheumatic Affections.

According to G. L. Kessler, in the Brooklyn Medical Journal for June, hot dry air is especially indicated in rheumatism and gout. The air should be in constant circulation, dry and the temperature gradually increased, but should not be carried over 380 deg. F. The head must never be in the apparatus. Of course the parts under treatment must be kept from contact with conductors of heat and the sweat must not be allowed to accumulate on the skin, as it is apt to scald at a temperature of 125 or over. The patient remains in the apparatus for 40 minutes to one hour.

The body temperature rises some but will return to normal in the course of an hour.

The author reports the very best results in a number of old chronic joint affections.

Health Laws of Illinois.

According to S. T. Hurst in the Medical Fortnightly for May 10th, the health laws of his state are not in very good shape.

He says, our laws are insufficient in that an examination does not apply to all alike.

They do not prevent quackery, but in-

stead take from each itinerant a hundred dollars a month, and the Board or funds of State profit by the business.

They do not prevent the forementioned frauds and fads from treating the sick and ailing, provided they use no medicines.

Because there are already licensed a great number who ethically are unworthy, though some of them may be able men, in high positions.

They do not provide against removal from the Board by a whimsical or capricious executive.

And greatest of all, our medical laws are not understood by the common people, who are and always will be the backbone of all law in a republican form of government.

Gynecology in 1876 and 1900.

Perhaps the last article written by Alex. J. C. Skene before his death is found in the Medical News for May 19th.

It is a short history of gynecology for the past fourteen years and the great strides taken by this young branch of medicine are well shown, though he leaves out many important contributions made by himself.

Judging from the past the future of this department is most hopeful, and while the workers drop out one by one, the work goes on.

Is Alcohol a Food?

H. Gasser, in the Medical Standard for July has a go at this question.

He is inclined to believe that it is a food in small quantities, and shows that the trouble is with the proper definition of food.

He modifies Atwater's definition and gets a very common sense result.

Food is that which taken into the body, builds tissue or yields energy without injurious effect upon the body.

He concludes that alcohol in excess is a poison, that while in moderation, as one glass of beer a day, it is not specially injurious, still there is no other practice that is so seductive and alluring in the formation of a bad habit.

That while in moderation it may afford some pleasure and gratification, it is not necessary. That in fact one can live a more safe, complete and happy life by total abstinence.

Intestinal Diseases of Children.

Wm. T. Newton has a very practical paper on this subject in the Medical and Surgical Monitor for May.

He advises calomel at the beginning and

in some cases castor oil, then fasting for 24 hours. If pain is a prominent symptom opium may be given but never until the bowels have been cleaned out.

Intestinal irrigations should be given at intervals of six or ten hours for the first two or three days. The normal salt solution is best for this purpose. He thinks bismuth a very useful remedy.

For high temperature he advises hydrotherapy. Old brandy when stimulation is necessary.

Intraocular Tumors.

C. Borck, in the St. Louis Medical Record for July 14th, discusses the two malignant varieties of tumors developing in the interior of the eyeball—glioma and sarcoma.

Glioma originates in the retina; sarcoma in any of the different portions of the uvea.

Glioma is exclusively a disease of childhood, occurring most frequently between birth and the age of seven. Sarcoma, on the other hand, is found most frequently between the 30th and 60th years.

The clinical course is very similar in both varieties and is divided into the following stages:

1. The period of indolent intra-ocular growth.
2. After the tumor has reached a certain size, it gives rise to increased intra-ocular tension, accompanied by inflammatory symptoms and pain; glaucomatous period.
3. The period of extra-ocular growth, after the tumor has pierced the sclera or cornea.
4. The period of metastases.

As soon as the diagnosis is made, enucleation is indicated in the first two periods, evisceration of the orbit in the third and in case of recurrence.

Lester's Sound in Ankylosis of the Ossicles.

S. H. Large in the Cleveland Medical Gazette for July reports very favorably on the electric pressure sound in alkylosis of ossicles and direct vibration of the membrana tympani. The instrument is a sound on its end a spiral spring with a hollow cone, this is adjusted to a motor run by two volts.

Dr. Lester's directions for using the instrument are as follows:

The head of the patient is turned slightly to the opposite side as for an ordinary examination of the middle ear, an ordinary sound speculum, which must not be too long, is introduced and canal illuminated,

the right hand grasps the handle of the motor with the thumb resting on the button of the contact spring, the corrugated handle of the pressure sound is firmly held between the thumb and index finger of the left hand, the tip of the little finger is made to rest gently on the head of the patient immediately behind the auricle and the sound is introduced parallel to the anterior superior wall of the auditory canal until the cylindrical extremity of the spiral end rests upon the base of the shut process of the malleus.

When contact is made vibrations ranging from five to fifteen hundred per minute are produced, the extent of length of the vibrations is controlled by the eccentric throw and the binding screw.

Maternal Impression.

A rather remarkable case is reported by P. B. McCutcheon in the Interstate Medical Journal for June.

A newly married woman, brunette, and her husband, who is also a brunette, went to a museum where they saw a male albino, which interested them both very much; in fact, made an *impression* upon them. They thought a great deal of him and often spoke of him to their friends. About one month later she became pregnant (she insists that she was not pregnant when she saw the albino) and in the eighth month of pregnancy she was delivered of a girl with black hair and eyes. It was still-born, due, as the mother believes, to her carrying a heavy bundle.

Nothing remarkable in this, but let us continue to follow up the developments as they occur.

Eleven months later a well-developed boy is born whose *hair is white and eyes are pink—a perfect albino* like the man they had seen in the museum.

This child lived until he was seventeen months old, when he died from "teething."

The third child is another boy, who, like the first one, has black hair, but blue eyes. He lived thirteen months and died from the effects of being scalded with hot milk.

The fourth child, a girl, a perfect albino, lived a few minutes; death was due to slow delivery, as she presented by the breech.

The fifth child was an anencephalous albino boy, still-born, breech presentation.

The sixth child was also an anencephalous albino girl; she lived a few minutes.

The seventh, a boy with black hair and eyes, was well developed and lived two months. Death was due to colic.

The eighth, an albino boy, lived a few minutes.

The ninth, an albino girl, lived three months. This child also died of colic.

The tenth, an albino girl, lived one year. Most probably death was due to congestion of the lungs.

The eleventh, an albino girl, was born on March 20th, 1900, and is still alive April 21st. The presentation was the left knee (breech), and the labor was long and tedious.

Mural Endocarditis.

Harold Williams and T. Leary, in the Boston Medical and Surgical Journal for July 12th, report a case of this rare condition.

The patient was a lady, inclined to obesity, 54 years of age. The first symptoms were those of angina pectoris, and she lived about three months after their appearance.

The autopsy was held by Dr. Leary and his conclusions are as follows:

We have to do with a generalized arteriosclerosis, affecting vessels of medium and small size particularly.

The localization of the extreme process in a portion of the wall of left ventricle is undoubtedly dependent upon the obliteration of the right coronary artery, the area affected representing the distribution of the terminal branches of that vessel.

The muscular segmentation, which was found generally throughout heart muscle has rarely been described except in connection with acute diseases. It has always been a question whether the process was not a post-mortem change. In this case the autopsy was performed only twenty hours post mortem and the tissues immediately placed in fixing fluids.

The absence of cardiac murmurs is remarkable, as, judging from the post-mortem picture, it would have been impossible for the flaps of the mitral valve to meet unless systole were accompanied by extreme distortion of the left ventricle. The absence of pain is also a remarkable feature.

Acute Diarrheas of Infancy.

Gilman P. Robinson in the Atlanta Journal Record of Medicine for June discusses the management of the acute diarrheas of infancy. In speaking of cholera infantum he says that there are five main indications for treatment: (1) To empty the stomach and bowels of their toxic contents, (2) to supply fluid to the depleted tissues, (3) to restore the surface circulation, (4) to reduce the internal tempera-

ture, (5) to sustain the strength until the disease has run its course.

Purgatives acts too slowly; hence our chief reliance must be in washing the stomach and irrigation of the lower bowel. This must be done early and vigorously. It is useless to try to supply fluids by the mouth, as they will be immediately vomited. Cold sterile water can be tried, however. The injection of normal salt solution into the cellular tissues is the only method of introducing fluid that can be depended upon. A pint should be given during the twenty-four hours. This not only supplies fluid to the tissues but helps to eliminate the toxic products and so restore surface circulation.

Irrigation of the lower bowel with cold water not only tends to lessen the internal temperature, but restores the surface circulation. The best methods for doing this, however, are rubbing, mustard baths, and the warm pack. These procedures, however, are not those best fitted to reduce the temperature, hence it is well to use cold in the form of sponging, packs, and baths. Often it is necessary to determine in individual cases whether the internal congestion or the temperature is doing the most harm, and to treat the most serious condition. The relief of one often helps the other.

As food cannot be given by the mouth, the patient must be kept alive by stimulation. As drugs given by the mouth are not absorbed, this stimulation must be given subcutaneously. The usual stimulants are given, though atropine seems to be the most useful. It should be given in doses of one five-hundredth to one eight-hundredth of a grain. Morphine can be given where the diarrhea, vomiting or restlessness are extreme. One one-hundredth of a grain is usually sufficient. Give it under the skin, and use care not to give it too long nor in too large doses.

As improvement begins, stimulants and water can be given by the mouth, and soon pasteurized milk of very low percentage can be added.

Ankle Sprains.

Edward H. Ochsner in speaking on this subject, before the Illinois Medical Society as reported in the Journal of the American Medical Association for June 2d, described and demonstrated a method which consists in careful and systematic strapping with rubber adhesive straps. These are cut from one-half to three-quarters of an inch in width, and the proper length. If a small ankle, they should be one-half inch

wide; if a large one, they may be three-quarters of an inch, but no wider: on this and on the accuracy with which they are applied depends the success of the method. If the straps are too wide, or if they are applied in a haphazard manner, failure is sure to result. The foot is held at slightly less than a right angle and a trifle everted, the former element in the position is observed because it is easier to walk on a painful ankle if it is held slightly in the calcaneum than if held in the equinus position; the latter element is observed because ankle sprains are usually caused by a sudden inversion of the foot, thus injuring the external ligaments, hence slightly everting the foot relieves the tension of these ligaments and places them at rest. With the foot in this position, one end of the strap is applied to the inner surface of the foot near its posterior end, and brought under the heel and up on the outer posterior surfaces of the leg to within a few inches of the knee. At the lower end this falls into the depression just posterior to the external malleolus. A shorter strap is now applied by placing one end to the inner surface of the heel near the sole of the foot, then bringing it around over the tendo-Achillis to the outer surface of the foot, making it cover the first strap at a right angle and passing along parallel to the under border of the sole of the foot, then over the dorsum of the little toe. Another long one is then applied, anterior to the first, overlapping it about one-third of its width; then a short one, and so on alternately until the outer anterior aspect of the ankle is reached. Over all this a hard-rolled bandage is carefully and snugly applied. The patient is directed to lie still with the foot elevated until the warmth of the body has caused the plaster to adhere firmly. In a great majority of instances the patient can walk, with reasonable comfort, after a few hours.

He reported four cases from among the number he has treated, because they illustrated four different classes. The treatment of ankle sprains by this method he has found eminently satisfactory.

Bachache.

Backache is one of the commonest of complaints says Hospital; and although, of course, only a symptom, is one of such persistence and one which intrudes itself so forcibly upon the attention of the sufferer, that when it is at all pronounced it is apt to be regarded, by the patient at least, as the main point, the thing above all else to the relief of which treatment should be directed. It behooves us, then, to be well

aware how varied are the causes by which it may be produced.

In a paper recently read before the New Cross Medical Society, Mr. Harding Free-land pointed out how often this symptom is an indication of the existence of some disorder in the rectum. As he says, any morbid sensation referred to that portion of the back which corresponds to the posterior surface of the sacrum is frequently due to reflex irritation having its origin in the rectum, and even when it is associated with symptoms referable to the other pelvic organs—such as the bladder and the uterus—the rectum will not infrequently be found to be the organ primarily at fault. This dull, weary, aching pain over the sacrum is of a peculiarly annoying character and often prevents a man concentrating his mind upon his work. In such cases the presence of scybalous stools with viscid mucus may give the key to the situation, pointing, as it does, to chronic rectal catarrh—often only a part of a general catarrhal condition of the whole gastro-intestinal tract—which has become complicated by the lodgment of scybala. The treatment is to remove the scybala, to secure an efficient and regular action of the bowels, to relieve the catarrh, and to improve the general health. But

Nondiebetic Glycosuria.

Robert Loundly, in the British Medical Journal for April 24th, quoted by the Canadian Practitioner and Review for June, discusses the different varieties of glycosuria not of that type regarded as diabetic. These cases are not very numerous, but they are of importance. The method of testing the urine in these cases of pseudo-glycosuria is to boil a few drops of the urine in a drachm of Fehling's solution.

First, there is that form known as the alimentary. By giving the healthy person 300 to 500 grains of the syrup of grape sugar temporary glycosuria can be induced.

Another form of glycosuria is that caused by the abuse of alcohol. The presence of the sugar in the urine may be intermittent or permanent so long as the over-use continues. There is usually indications of the indigestion in these cases. The sugar disappears with the adoption of temperature habits.

In cases of chronic hepatitis there may be sugar in the urine. In some of these cases there was the history of biliary colic. In some of the instances there was the possibility that the derangement in the liver was due to drinking habits.

In chronic gastritis, glycosuria may be

met with. There may be some common connecting link in all those cases mentioned under the headings of alcohol, hepatic and gastric. It is most likely that cause will be found in the liver.

In neurasthenia glycosuria of temporary character is sometimes met with. In these cases no other cause can be discovered for the presence of the sugar. Some writers regard glycosuria as very frequent in neurasthenia, passing off as the patients gain their health.

In the old a senile type of glycosuria is frequently found. This must be regarded as an evidence of the breaking up of the system, and a restricted diet must be ordered with much care.

In the above forms of glycosuria there is an absence of the symptoms of diabetes. In these cases there need be few restrictions placed upon the diet, other than as required to meet indications such as the over-use of alcohol, sugar, or indigestible foods. Very little drug treatment is called for.

Catarrhal Deafness.

Dunbar Roy gives some observations on the prognosis and treatment in the so-called catarrhal deafness in the Medical Times for June.

The treatment he sums up in the following advice:

See that the nasal cavities and nasopharynx are placed in as healthy condition as possible by the treatment of all catarrhal states and the removal of all obstructions to free respiration.

See that the Eustachian tube and the middle ear are medicated at proper intervals in addition to the inflations.

Render the drum and ossicles as pliable as possible by some system of massage.

Don't forget the general health of the patient.

Such is the outline of the treatment in catarrhal deafness and the prognosis is always a matter of uncertainty in the best selected cases.

Cerebrospinal Meningitis.

R. B. H. Gradwohl, in the St. Louis Medical Review for May 19th, gives a clinical and bacteriological study of 34 cases of epidemic cerebrospinal meningitis.

After a careful study of these cases and the literature on the subject he says that it is a specific infectious disease.

It is not highly contagious, but only contagious in the sense that tuberculosis pulmonalis is contagious.

The diplococcus intracellularis mening-

itidis is the prime etiologic factor in the causation of epidemic cerebro-spinal meningitis.

In all suspected cases of meningitis, lumbar puncture should be resorted to as a means of differential diagnosis between an epidemic and a sporadic case.

The Gram method of staining is a rather uncertain means of differentiating the diplococcus intracellularis from the micrococcus lanceolatus.

The diplococcus intracellularis is especially pathogenic for dogs and cats.

The virulence of the infection, i. e., of the diplococcus intracellularis, varies in different cases and in different periods of its visitation upon the same patient; that the virulence of the infection tends towards an attenuation with the further progress of the disease, and that in the more chronic cases which have gone beyond the period of one month the virulence of the infection is almost lost.

The sign of Kernig is pathognomonic of meningitis.

Epidemic cerebro-spinal meningitis can be transmitted in utero.

The Tubercle Bacilli.

Before the Colorado Medical Society, Henry Sewall read a preliminary note on the relation of the form of the tubercle bacillus to the clinical aspect of pulmonary tuberculosis.

As reported by the Denver Medical Times for July, he said that when pulmonary consumptives are classified according to their clinical signs and symptoms, into groups composed of those who are 1, recovering; 2, simply holding their own (old cases without active disease); 3, manifestly failing; the tubercle bacilli, as demonstrated in sputa, present characteristic morphological differences.

In the first group the prevailing form of the bacillus is a rather long, slender rod, more or less curved, taking the stain poorly and irregularly, its outlines appearing more or less corroded, and the body of the germ is occasionally beaded. In the second group the bacilli are usually long and formed of a string of spore-like beads. In the third group the characteristic form is a short, comparatively thick, deeply staining rod. Between these types there are all gradations. It is concluded that the active multiplication of tubercle bacilli in a favorable medium tends to result in the development of short, rod-like forms, while the slower propagation in uncongenial soil is manifested by the preponderance of bacilli having the character attributed to the first two groups.

Therapeutics of the Thymus Gland.

The Medical Record for July 14th, reports a paper by S. Solis Cohen before the New York County Medical Association on this subject.

He said that it had long been known that in cases of so-called thymic asthma children died through some mysterisus influence exerted by the thymus glands, and while many authors had written learnedly on the subject, he personally felt that they had shed very little light on it. One reason for contradictory statements from different competent observers was to be found in the varying qualities of different preparations. He had addressed a letter of inquiry to the principal manufacturers of these products, and from their replies he had learned that no two of the American products were alike. Mr. David Owen's supposed cure of a case of exophthalmic goitre by the administration of thyroid extract turned out, on further investigation, to be a case in which, without his knowledge, the butcher had substituted thymus gland. This had naturally led to the deliberate use of thymus gland from the calf. In one of his cases that showed no improvement, it was discovered that the thymus gland from the sheep had been used instead. In a case of severe exophthalmic goitre, reported by Mr. Todd, of England recovery ensued after the use of the thymus gland from the calf, although previously it had proved most obstinate under all the approved methods of medication. Dr. Cohen said that he had personally seen many good results from the use of this gland, but he had recently abandoned it in favor of suprarenal gland extract, which acted still better. Some cases presented symptoms which were best controlled by the suprarenal extract; others yielded better to the thymus extract. On the whole, a combination of the two had seemed to work better than either one alone. Physiologists had not given us much light on this matter. We were told that the active principle of the thymus gland when injected into the veins caused extensive vascular clotting, and hence this remedy had been used as a styptic, and had been recommended in cases of hæmophilia. This extract had also been used and recommended in leukæmia, rickets, and rheumatoid arthritis. Kinnicutt and others had claimed good results from it in pulmonary tuberculosis. Chittenden had shown that the thymus gland contained an exceedingly large proportion of phosphorus, which might possibly explain some of the good results claimed for it.

Pneumonic Complications in Pulmonary Phthisis.

In a paper before the California Medical Society, as reported by the Occidental Medical Times for July, W. Ophuls gave the results of his personal studies of about sixty post mortems.

The pneumonic complications in pulmonary phthisis were stated to be due in many instances to the tubercle bacilli alone, and result from the aspiration of the contents of pulmonary cavities. These complications vary, depending on whether they are due to the action of tubercle bacilli alone or to the action of tubercle bacilli in conjunction with other pathogenic forms. The ultimate outcome locally seems very unfavorable in that rapid caseation and disintegration of lung tissue ensue, the rapidity of the process varying with its more or less acute character. In some forms the infection is mixed from the beginning, and here also we can distinguish between the acute and chronic forms, and the importance of mixed and secondary infections in the development of the destructive process in phthisical lungs must be admitted.

Glaucoma and Optic Nerve Atrophy.

J. M. Ball, in the Journal of the American Medical Association for June 2d, discusses the propriety of removing the cervical sympathetic in glaucoma and optic nerve atrophy.

He says that excision of the superior cervical ganglion is a most valuable procedure in glaucoma.

It is of more value in glaucoma simplex than in inflammatory glaucoma.

In inflammatory glaucoma, on which iridectomy has been done without benefit, excision of the superior cervical ganglion should certainly be tried.

In cases of absolute glaucoma with pain, sympathectomy is to be tried before resorting to any operation on the eyeball.

In cases of simple optic nerve atrophy, sympathectomy may possibly be beneficial if done before vision is entirely lost.

In cases of exophthalmic goiter, which do not improve under hygienic medicinal and electric treatment, excision of the cervical sympathetic on both sides is to be advised.

In unilateral glaucoma excision of the sympathetic ganglion is to be done only on the corresponding side.

In the hands of a careful operator, excision of the superior and middle ganglia is a safe operation, but removal of the inferior ganglion can be done safely only by the most skilful surgeons.

The postmastoid route is to be preferred in excision of any part, or all of the cervical sympathetic.

The fact that glaucoma is improved by sympathectomy and the finding of pathologic changes in the excised ganglia suggest the conclusion that this affection is due either to a permanent irritation of the cervical sympathetic, or to an irritation located elsewhere and transmitted by means of the cervical sympathetic.

Treatment of Lupus and Skin Diseases with X-rays.

Albers-Schonberg and P. Hahn (Munch. Med. Wochenschr., 47, 1900), Medical Age, May 25th, in a lengthy paper on the action of the X-rays upon diseased and healthy skin, arrive at the following conclusions:

1. X-rays act favorably upon lupus and other skin manifestations.
2. They remove concomitant eczema and elephantiasis infiltration around the lupus, and
3. Are consequently of value when we have to treat flat, large surfaces.
4. Relapses occur with this method as well as with others, and
5. Other methods are not excluded when X-rays are applied.
6. By judicious use and sufficient technical knowledge all the undesirable after-effects, as dermatitis, excoriations, gangrene, etc., are surely avoided.

Trophic Troubles Caused by Radiography.

The Canadian Practitioner and Review for May, quoting the Lyon Medical, says that at the Société Nationale de Médecine de Lyon, M. Destot spoke of the trophic disturbances due to X-rays, and opposed the use of the latter for therapeutic purposes in dermatology. He quoted cases in which the rays had caused serious disturbances. He referred especially to a case of lupus treated by the rays, where the latter not only caused no improvement, but gave rise to ulceration which was not cured after five months.

These results could be avoided by interposing a thin sheet of aluminum, or by employing the static machine.

M. Leclerc related the case of a patient with an old fracture of the patella who was radiographed fifteen months ago. After three weeks an ulcer developed, which was slow in healing. It was a question here of nervous lesions, central or peripheral. M. Monoyer asked whether the cause was physical or nervous. It seemed to be nervous.

Among the inconveniences attending the use of the rays in therapeutics was the difficulty of limiting their action to a definite zone. M. Horand asked M. Destot if it were not possible in the X-rays to separate the caloric from the chemical rays, as experiments had been made in that direction in Germany for the treatment of diseases of the skin, especially lupus. As for heat, M. Horand said, it can exert a good influence on affections of the skin. Thus it is that the air, under a high pressure, and at a temperature of 200 deg., can improve lupus, tuberculous and cutaneous lesions, when it is projected with special apparatus and by a trained hand. M. Destot replied that Druser in his treatment by light separates the light rays from the caloric rays. The latter are checked by crystal lenses through which passes a stream of fresh water. As regards the X-rays, M. Destot has shown that their ill effects can be prevented by a sheet of aluminum.

Organic and Hysterical Hemiplegia.

According to the St. Louis Medical Review for May 26th, Babinski, in Gazette des Hopitaux, gives the following differential diagnosis between organic and hysterical hemiplegia:

ORGANIC HEMIPLEGIA.

1. The paralysis is limited to one side of the body.
2. The paralysis is not systematic.
3. The conscious voluntary movements are affected, as are the unconscious.
4. The tongue deviates from the affected side.
5. There is a hypotonicity of the muscles.
6. The tendon and bone reflexes are often disturbed at first.
7. Cutaneous reflexes are usually affected.
8. The contracture is a peculiar one and cannot be imitated at will.
9. The evolution is regular.

HYSTERICAL HEMIPLEGIA.

1. Paralysis is not limited to one side of the body.
2. The paralysis is sometimes systematic.
3. Neither conscious nor unconscious voluntary movements are affected.
4. The tongue is sometimes lightly deviated; it may be to either side.
5. There is no hypotonicity.
6. Tendon and bone reflexes are not affected.
7. The skin reflexes are not modified.
8. The contracture can be reproduced by a voluntary muscular action.
9. The evolution is capricious.

Digestive Disturbances in Pulmonary Tuberculosis.

C. B. VanZant, in the Denver Medical Times for July, writes on the causes and importance of digestive disturbances in pulmonary tuberculosis.

Two questions are considered in the paper; first, are dyspeptics more prone to develop tuberculosis than others? Second, are tuberculous subjects more prone to develop digestive derangements than others?

Both of the questions are answered in the affirmative, and the practical lesson drawn is to be very careful of the digestive system of our tuberculous patients.

He objects to the method of treating a patient by telling him to take cod liver oil and whiskey, as he will get so he takes the whiskey straight to the harm of his stomach. If alcoholics are indicated we should use the less concentrated forms.

Vomiting of Pregnancy.

Gaillard's Medical Journal for June says that Barth (Norsk Mag. f. Laegevidensk.) gives full clinical details of two cases of uncontrollable vomiting of pregnancy in which it was found necessary to induce abortion to save the mother's life. In both cases there was the history of preceding miscarriages, and in both there was constriction at the internal os uteri as shown by the existence of a marked groove on the laminaria tent which was used to induce the abortion. There had been severe endometritis, and there was rigidity of the vaginal portion of the cervix. In one there was a well-marked erosion on the cervix, in the other the indication of the beginning of one. Morphine, bromide of ammonium, and oxalate of cerium had been tried, but with no good result, and the application of cocaine on iodoform gauze to the cervix thrice daily was also without effect. Barth believes that the vomiting is due to neurosis of the sympathetic system, and points out how densely the sympathetic fibers and ganglia surround the os uteri internum. There was marked ptialism with viscid mucus, a circumstance which also pointed to the involvement of the sympathetic.

Labor "Down Hill."

Alex. Irvine in the Virginia Medical Semi-Monthly for July contributes the following article on this subject.

Labor 'down hill?' The woman should be in the kneeling position, with elbows resting on the bottom of a chair, which can be supported by some one sitting on the side of bed. I have the patient spread

down a blanket or quilt, and get out on the floor, and rest elbows on a chair as above. In this kneeling position, you get the full benefit of gravity; and the abdominal muscles can act to the best advantage in "bearing down," just as a dog does in defecating. The knees should be kept as close together as possible. The weight of the body on the knees causes the pubic joint to spread, as I have tested on the skeleton and on cadaver after symphysiotomy.

The reason for keeping the knees close together is to take advantage of the angle in the femur at the hip-joint. The patient's weight on her knees spreads the pubic joint—thus increasing the cavity of the pelvis, and thereby facilitating labor. Labor in this position is also aided by the weight of the child plus the weight of the abdominal viscera. It can also be much hastened by the use of the Kristetter's method, which consists in the placing of the accoucheur's hands on the patient's abdomen, and with each pain endeavor to push the fœtus through the pelvic channels.

Another position for greatly hastening labor is by half reclining position recommended by Professor Playfair. I can spread the pubic joint in this position, by keeping the patient's knees close together, as in the kneeling position; the legs are flexed on the thighs; this is a natural position. Pressure is made on each knee; during labor pain this causes spreading of the pubic joint.

What I claim for these positions is that they spread the pubic joint, and give more room in the pelvis; therefore, they will take the place of the forceps in very many cases, as also symphysiotomy to a certain extent. Let any one give these positions a trial when he thinks he has a forceps case, and he will be most pleasantly surprised at the results.

I have seen no mention in medical literature of these positions for the purpose of spreading the pubic joint, nor of the kneeling position, or labor "down hill," as I call it.

Wounds of the Abdominal Viscera without Visible Injury to the Skin.

Geo. T. Vaughan, in the Virginia Medical Semi-Monthly for July 13th, says that the first questions are: Is the lesion of sufficient severity to require celiotomy?

What organ is probably injured?

In answering these questions the surgeon must study the temperature, pulse, pain and tenderness, vomiting, restlessness and thirst, expression of countenance, condition of ab-

dominal muscles, and the local symptoms. Blood should be looked for in the vomitus, stools or urine.

The history of the injury may be useful in determining the organ injured.

When indicated early operation is best. If in doubt as to particular organ injured, open in the middle line. Having opened the abdomen, first stop the hemorrhage, sew up lacerations in the stomach or intestines with silk, in the solid viscera, as the liver or kidney, with catgut.

Extensive laceration of spleen or kidney require removal of the affected organ.

If contents of stomach or bowels have escaped into the general cavity wash out with normal salt solution.

If there is blood simply sponge out. For severe hemorrhage use intravenous injection of salt solution.

Vaginal Douche.

In a paper on the use and abuse of the vaginal douche in Gaillard's Medical Journal for June, I. S. Stone gives the following advice in regard to its use:

It is important to follow Emmet's directions if we are to secure benefit from use of hot vaginal douches.

Douches should be prescribed by the physician only, who should indicate how long a period of such treatment is required, and when it may be discontinued.

The necessity for sterilization of the syringe point should not be overlooked in any case, and it should be remembered that sterilization does not mean a short immersion of an instrument in an antiseptic solution, but resort should be had to boiling.

Vaginal washes may possibly relieve a vaginitis, but they never cure endometritis. Hence we need not have patients continue such treatment indefinitely to the exclusion of other appropriate measures.

Treatment of Tuberculosis.

"If the cause is removed, the cure will follow" is the title of a paper by W. J. Chenoweth in the Virginia Medical Semi-Monthly for May 25th on the treatment of tuberculosis of the lungs.

The treatment is mostly concerned with the germs and the cell and he gives the following summary in closing.

Tuberculosis of the lungs results from contact of a specific germ with a lung especially adapted to its nutrition. An attenuated germ cannot cause it. A healthy lung will not permit it. Hence it is irrational to expect to cure the disease by removing the germ. It might be prevented,

if we had knowledge of its presence before it caused the disease, but this is not yet possible. After a lesion has been effected, reliance for cure is on the cells which regenerate the tissue caused by the ordinary wear and tear of life's processes. That they can be made to accomplish this by artificial stimulants, is not credible when we reflect that it was their want of ability to destroy the germs which permitted the destruction incident to their increase. There cannot be any better known means of cure than to establish a healthy condition by suitable hygienic surroundings and proper food.

Present Status of the Murphy Button.

J. B. Murphy presented a paper on this subject to the American Med. Association, and as reported in the Medical Record for June 9th, he said that just eight years ago he used the button on the first human case. He cited many statistics showing the influence of the button in lowering the mortality of all anastomotic work. In detail, he considered them as follows: Entero-enterostomy, which formerly yielded a mortality of from fifty to one hundred per cent., now showed a mortality of but 19.7 per cent. This seemed to Dr. Murphy to demonstrate the great value of his button in gangrenous hernia when the mortality reached the ebbs figure of fourteen per cent. It was for the operation of cholecystenterostomy that the button was first devised. Prior to its introduction there had been but eleven cases recorded. While formerly he recommended it in every gall-bladder case, he would now restrict its use to conditions in which there was permanent obstruction to the common duct. The mortality was 14.7 per cent. Gastro-enterostomy and uretero-enterostomy presented very favorable statistics. Reviewing the history of gut approximation, he spoke of the early efforts of the French, as far back as 1802, and said that Senn's classic paper in 1888 gave a tremendous impetus to bowel surgery. In the eight years during which the button had been used, the following conclusions regarding it has been reached: (1) It approximated without suture. (2) The time of operation was much shortened. (3) The union was ideal. (4) There was no contraction of the scar. (5) The physiological function of the gut was not interrupted at any time. There were two great classes of objections to the use of the button: (1) The opening might be occluded by food or other particles, prior to the sloughing of its attachment. (2) There might be prolonged retention of the button in the gut or abdominal cavity. Both these

matters were of small moment, there having been but three fatal cases, in the 1,620 considered, traceable to such causes. It was of little consequence whether the button was passed or not. The portions of the canal in which it had been found retained were enumerated as follows. in the stomach, 22 times; colon, 5 times; ileum, 2 times; jejunum, 1 time; cæcum, 2 times; rectum, 4 times.

Static Electricity in Neurasthenic Cases.

H. V. Halbert, in the *Journal of Electro-Therapeutics* for June, speaks very favorably of the static current in neurasthenic cases.

In his own practice he has noticed that the tonic effect in a majority of cases were very marked and the anemic condition, as we all know, should receive first attention in these cases.

Furthermore, the static breeze is a pleasant sedative without any irritative reactions. The inhibitory power of the cell is restored by the use of electricity and morbid exudates, hyperplasia and other tissue changes are removed.

He concludes that we have an adjuvant, in static electricity, which will be most helpful and that future experiments will demonstrate results which are not obtainable by medicine.

Experiments on Intestinal Suture.

According to the *Maryland Medical Journal* for June, Edmunds and Stubb in the *Lancet* for April 14th, report the results of some experiments to determine the best method of circular suture of the intestines.

The methods contrasted were: (1) Halsted's inflated rubber cylinders; (2) Murphy's button; and (3) Laplace's intestinal forceps. Seven experiments by each method were made on dogs. All recovered where Halsted's cylinders were used, five where Murphy's button was used, and four where Laplace's forceps were employed. The failures were all due to non-union.

From actual results the verdict is entirely in favor of Halsted's cylinders. The effect of the inflated cylinder is to push back the mucous membrane, which otherwise always is everted so much as to interfere materially with the suturing of the outer coats, and the coaptation of the peritoneal surfaces. The cylinder also prevents the escape of the intestinal contents, thus dispensing with clamps.

Murphy's button is not trustworthy unless external sutures are applied. If this is done the time of the operation is lengthened,

and the instrument becomes in part an apparatus for facilitating the application of sutures. After the Halsted operation the animals passed formed stools on the next day. This is not so with the button, and the danger is not over till the button is expelled.

The Laplace forceps were very unsatisfactory, and afforded no aid in suturing, and in three out of seven cases failed. The authors think that the difference in the thickness of the muscular coats of the intestines of dogs and men does not invalidate their conclusions.

Typhoid Fever among American Soldiers in 1898.

Victor C. Vaughan, in the *Journal of the American Medical Association* for June 9th, gives some conclusions reached after a study of this disease among the American soldiers in 1898.

They are, that every regiment in the U. S. service in 1898 developed typhoid fever.

More than 90 per cent. of the volunteer regiments developed typhoid fever within eight weeks after assembling in the State encampments.

Most, probably all, of the regular regiments developed typhoid fever within eight weeks after going into camp.

Typhoid fever not only appeared in every regiment in the service, but it became epidemic, both in the small encampments of not more than one regiment, and in the larger ones consisting of one or more corps.

Typhoid fever became epidemic in camps located in the Northern as well as in those located in the Southern States.

Typhoid fever is so widely distributed in this country that one or more cases are likely to appear in any regiment within eight weeks after assembling.

It usually appears in military expeditions within eight weeks after assembling.

The miasmatic theory and the pythogenic theory of the origin of typhoid are not supported by the investigations.

The specific origin was confirmed.

With typhoid fever as widely disseminated as it is in this country, the chances are that if a regiment of 1300 men should be assembled in any section and kept in a camp, the sanitary conditions of which were perfect, one or more cases of typhoid fever would develop.

It is disseminated by the transference of the excretions of an infected individual to the alimentary canals of others.

It is more likely to become epidemic in camps than in civil life because of the greater difficulty of disposing of the excretions.

An infected man may scatter the infection in every latrine of a regiment before the disease is recognized in himself.

Camp pollution was the great sanitary sin committed by the troops in 1898.

Some commands were unwisely located and in some instances the space allotted the regiments was inadequate.

Many commands were allowed to remain on one site too long, and the requests for change were not always granted.

Superior line officers were to some extent responsible for the unsanitary conditions.

Greater authority should be given medical officers in matters relating to the hygiene of camps.

Number of cases in the different camps varied with the method of disposing of excretions.

The tub system of disposal of fecal matter is commended, the regulation pit system not being satisfactory.

In permanent camps, where there is no water carriage, all fecal matter should be disinfected and then carted away.

Infected water was not an important factor, but flies undoubtedly served as carriers of infection. It is likely that men transported infected material on their persons or in their clothing and thus disseminated the disease.

Personal contact and air in the form of dust helped to spread the disease.

A command badly infected does not loose the infection by change of location unless the clothing, bedding and tentage is thoroughly disinfected.

One command should not be located on the site recently vacated by another.

Beds should be raised from the ground and the tents not overcrowded.

Outer clothing should be removed at night.

Malaria was not very prevalent and the continued fever was typhoid.

Coincident infection of malaria and typhoid may occur, but it cannot be recognized as a separate disease.

One-fifth of the soldiers developed typhoid, and less than 50 per cent. of the cases were properly diagnosed. The mortality was 7.5 per cent.

When a command is thoroughly saturated with typhoid one-third to one-fourth of the men are susceptible to the disease.

In military practice it is often *apparently* an intermittent disease.

Errors in diet, causing catarrh or gastrointestinal disorders do not induce the disease.

Eighty per cent. of all deaths were from typhoid.

The shortest period of incubation is probably something under eight days.

One who has lived in a camp, in which typhoid is prevalent, is liable to develop this disease any time within eight weeks after leaving such a camp.

Renal Calculi.

A case of stone in the kidney is reported by W. B. Ried in the July issue of the International Journal of Surgery. A nephrotomy was done and one large stone and several small ones were removed.

After washing the kidney and pelvis free from concretions with salt solution, hemorrhage was arrested by gentle pressure with very hot sponges. The capsule was stitched together with very fine catgut. The muscles and fascia were brought together in separate layers. No drainage was used, except a small strip of iodoform gauze, which was removed on the second day. No leakage of urine followed.

The patient made an uninterrupted recovery, the temperature never rising above one hundred. Up to the present writing he is in perfect health.

The specimen is irregular in shape. From the large mass projects a spur which extended into the kidney substance. It measures 3.6 cm. in length, 2.5 cm. in the broadest part of its transverse axis. It weighs 585 grains. It is composed of uric acid and oxalate of lime. Little sharp spurs are seen covering the surface which accounts for the intense pain which the patient suffered.

Rumination and Periodic and Habitual Vomiting.

Five cases of "chewing the cud" are reported by Fenton B. Turck in Medicine for June.

The chief characteristics of these cases were: a subconscious habit which closely simulated volitional movements; pathological conditions often exist which act in connection with the pneumogastric nerve in a reflex way; ruminating patients can suppress the act but in so doing they feel considerable distress.

Such suppression is often followed by a period in which the habit is followed with increased vigor.

In one of the cases, the suppression of rumination caused great discomfort, which was accompanied by hiccough and a sensation in the back of the head, which the patient described as if wheels were going round. A return to the habit was followed by relief of these subjective symptoms.

Ocular Changes in Disease.

In the Maryland Medical Journal for June, G. E. de Schweinitz has an article on certain changes in the vessels and vascular coats of the eye, which are of diagnostic and prognostic value in general disease.

The important points brought out in the paper are that:

Flitting conjunctivo-episcleral congestions may be the only symptom of masked gout.

Such congestions may be the prodromes of later gouty manifestations in the eye or elsewhere in the body, but also (and most importantly) may be the forerunners, associates or alternates of retinal-vessel changes which, in their turn, are the indications of general arterio-sclerosis of serious prognostic import.

The same conclusion applies to recurring subconjunctival and recurring subcutaneous palpebral hemorrhages, which seem, however, to be related especially to the chronic form of nephritis, exactly as is the classical retinitis.

Inflammation, hemorrhage and edema, with exudation, are not necessarily the ophthalmoscopic signs of general arterial disease or of its special localization in certain organs, for example, the kidney. It may be manifested with perhaps equal frequency by alterations in the walls of the retinal arteries and changes in the course and caliber of the veins, together with signs of mechanical pressure where veins and arteries cross.

These retinal-vessel changes may be present when ordinary physical examination does not reveal the signs of endarterial change in the surface vessels of the body generally.

Renal Tuberculosis.

Otto G. Ramsay contributes an article to the June issue of the *Annals of Gynecology and Pediatrics* on the surgical treatment of primary renal tuberculosis with a consideration of the results obtained by operation. He collects for study 304 cases in which some form of operative treatment was done.

After a careful study of these cases he concludes that in renal tuberculosis some form of surgical treatment is always indicated.

That this surgical treatment may have a palliative or curative effect in view, depending upon the condition of the patient and extent of the disease.

That nephrotomy as a palliative operation for the immediate relief of dangerous

symptoms is most valuable, and that it does not preclude a later nephrectomy.

That resection of the diseased part of the kidney is contraindicated in every case of renal tuberculosis.

That nephrectomy or nephro-ureterectomy is indicated in every case where tuberculosis has not developed in other organs, or where there is no fatal disease of other organs.

That tuberculosis of the bladder or a small focus of tuberculosis in one lung are not considered as contra-indications to nephrectomy.

That primary nephrectomy or nephro-ureterectomy when performed in suitable cases has been followed by final cure in 56 per cent. of the cases operated on.

That with the present advances in the methods of examination and in the technique of operations, the percentage of final cures should be materially increased.

Treatment of the Wound After Abdominal Section.

In the *Cleveland Journal of Medicine* for June, Hunter Robb discusses the suppuration of the wound after abdominal section, based upon an analysis of 114 consecutive unselected cases without a death.

He describes his method as follows:

In our present series of 114 cases we have found the following procedures to give the best results: The peritoneum is first brought together with dry (Killiani's) sterilized catgut. The edges of the fascia are then approximated by sterilized silver-wire mattress sutures and the skin of the wound is finally closed by a subcuticular (Killiani) catgut suture. The incision and the immediate field of operation are then cleansed with sterilized salt solution and afterwards with alcohol, and are then gently dried with a sterilized towel. Over the site of the incision dry sterilized iodoform powder is sprinkled, and two thicknesses of sterilized gauze and a sufficient quantity of sterilized cotton are placed so that not only the wound but also the whole abdomen is thoroughly protected, from a symphysis pubis to just above the umbilicus and from flank to flank. This dressing is then held securely in place by means of strips of adhesive rubber plaster reaching from the unsterilized flank on one side to that of the opposite side. This dressing in our hands has proved most satisfactory, and we have found that even in the case of restless patients, who have moved about in bed a good deal, the wound has never been exposed on account of the slipping out of place of the dressing, and infections of the skin have

been very rare. In our series of 114 consecutive cases, in 29 of which pus (from one ounce to several liters) was found at the time of the operation, the pus was removed as thoroughly as possible by irrigating the abdominal cavity with sterile salt-solution, and then sponging it dry. Drainage was used only in one instance. Suppuration of the abdominal wound occurred in 8 cases, 7.2%; in 4 it was slight and entirely confined to the skin; in 2 of these cases the *staphylococcus pyogenes aureus* and in 1 case the *staphylococcus pyogenes albus* were demonstrated; and 4 cases there was a considerable amount of purulent discharge in the lower angle of the wound, 2 of which did not however involve the deeper tissues. In these cases the *staphylococcus pyogenes aureus* was found in the pus. In a certain number of our cases we were using at that time chromicised catgut and to this we attribute the suppuration.

The Medical Treatment of Gall Stones.

Edward S. Stevens, in the Cincinnati Lancet-Clinic for June 9th, writes on the medical treatment of gall stones.

He starts out by saying that there is no medical treatment for this condition and the only safe and radical plan is to use the knife. But on account of the objections of the patient we may have to use palliative agents for a time at least.

Morphine hypodermically for the pain and spasm, aperient water and olive oil. But this should only be used long enough to gain the patient's consent to an operation, which is the only thing that will cure.

Traumatic Tetanus Treated With Antitoxin and Chloral.

T. R. H. Willis, in the Australasian Medical Gazette, January 20, quoted in Pediatrics for May 15th, reports a case of traumatic tetanus which recovered under the use of the antitoxin. The patient was a boy, aged 13, who sustained a superficial abrasion over the left patella. Ten days later the symptoms of lockjaw appeared. He was given chloral hydrate in doses of ten grains every four hours, and an intravenous injection of the anti-tetanic serum. The serum was injected, under chloroform, into the left median basilic vein, 40 cc. being used at the first injection. On the following day he received 10 cc. subcutaneously, and in addition 1-200 gr. of hyoscin. As the spasms did not cease on the following day, he was given morphia, 1-6 gr., subcutaneously, which was followed by almost immediate relief.

The chloral was continued. On the following day the spasms reappeared, and he was given another intravenous injection of 40 cc. of antitoxin. From that time on he began to mend. He still kept on taking chloral. He had several relapses before convalescence finally set in. He received each time, injections in doses varying from 20 to 40 cc. and chloral in doses of 40 grains per diem. A curious feature of the case was that each injection was succeeded by violent spasms, and the first general convulsion noticed occurred after the first injection. The writer does not think that the recovery was due solely to the serum, but believes that the chloral contributed considerably to the relief of the spasms.

Infantile Constipation.

The Chicago Clinic for July quotes an abstract from La Presse Medicale of June 6th, in which M. Dorfler says, that he has obtained excellent results from the administration of fresh butter to young infants afflicted with this trouble. Constipation frequently follows the feeding with cows' milk, whether sterilized or not, and the butter proves beneficial where no other gastrointestinal disturbance is present. The amount varies with the age of the child. A half teaspoonful is given to children of from one to three months, with a spoonful of coffee, morning, noon and night. Children of from five to twelve months are fed with from one to three teaspoonfuls of butter at evening, every two or three days, this being continued until the stools are regulated. It is found ordinarily that the bowels will expel a pasty stool within the four or five hours following the administration of butter. When a normal condition of the bowels is reached the remedy should be discontinued and resorted to again if the trouble recurs. Absolutely fresh butter should be employed, and the reporter has found no difficulty in getting children to swallow it. The butter seems also to improve nutrition.

Electricity in Exophthalmic Goitre and in Simple Chronic Glaucoma.

In the Journal of Eye, Ear and Throat Diseases for May-June, M.E. Valude speaks very favorably of the use of electricity in exophthalmic goitre and in simple chronic glaucoma.

After reporting several cases he concludes that in Basedow's disease, since there are few efficacious treatments, intensive galvanization of the cervical sympathetic should be employed at once, and to it should be added, as has been described above, fa-

radization of the orbicularis palpebrarum and of the præcordial region.

One must not dream of surgical interference upon the sympathetic except when electrization has failed to give any result.

In simple chronic glaucoma the usual medication by myotic collyriums should first be tried, instillations of eserine and of pilocarpine, but especially of eserine.

When myotic medication has completed its effect, or if it remain inefficacious, instead of proposing to the patient the dreaded operations of section, resection or even stretching of the cervical sympathetic, one should commence by trying the sedative effect of the positive pole on the nerve. It is only when galvanization, intensive, and regulated in precisely the way above described has been tried without result, that he considers it permissible to raise the question of surgical intervention.

Syphilis.

In the Medical Standard for June Wm. S. Gottheil contributes the second article in the series on syphilis.

He discusses the lymphadenitis, constitutional or secondary syphilis, secondary syphilis of the skin and the secondary macular syphiloderma.

In speaking of constitutional syphilis he says that it is about seven weeks after the appearance of the chancre, the symptoms of constitutional infection manifest themselves. The patient develops the peculiar cachexia, with mental depression, has a distinct fever, angina one of the commonest symptoms, pains in the various bones, muscles and joints, eruption on the skin without pain or itching.

The eruption he divides into four varieties, erythematous, papular, tubercular and pustular.

These varieties are then described in detail.

Placenta Previa.

In the Woman's Medical Journal for May, Jane R. Keefer writes on this subject.

She says that antisepsis has improved the prognosis, but that the prognosis of the child is to a certain extent antagonistic to the prognosis for the mother, that is the treatment which is safest for the mother may be harmful to the child. Induced labor may sacrifice the child in most cases, but the hazard to the mother is much less.

She is in favor of bringing on labor as soon as the diagnosis is made certainly.

She reports three cases in the past four years, but does not give her treatment in detail.

The Riding Fragment in Fractured Leg.

According to the Chicago Clinic for July, C. H. Golding-Bird, in the British Medical Journal for April 21st, says that the riding fragment in fractures of the tibia is due to a number of causes. Fracture of the tibia results from a twisting motion of the leg, by which a Y-shaped or spiral-shaped fracture is produced. There is also difficulty in maintaining them in place when they are once reduced. He finds the same difficulty in reducing the fragments by the open method that he does by non-operative means, showing conclusively to him that the cause of separation is not due, as a rule, to any trouble at the seat of the fracture of the tibia, but is due to, as he has proven by cutting down upon the fibula, to the misplaced position of the extremities of the fractured fibula. Fracture in the fibula usually takes place at a higher point than the fracture of the tibia, therefore the lower extremity has a considerable leverage power in displacing the fragments of the tibia. On cutting down and placing in apposition the fractured fibula, he found no difficulty in bringing the fragments of the tibia in apposition and in keeping them there. He recommends that where reposition of the tibia is difficult, cutting down upon the fibula, as well as upon the tibia, in order to bring the extremities of both bones in perfect apposition, and to prevent the tendency to displacement of the tibial fragment by the misplaced position of the fibular fragment.

Phosphorus.

L. H. Mettler, in the Medical Review for May 12th, writes on the use and abuse of this agent in nervous affections.

He considers it pre-eminently a stimulant to the processes of constructive metabolism and hence the danger in its indiscriminate use, as excessive metabolism means fatty degeneration.

He says that the phosphorus of the tissues is obtained from the food even when the drug is being administered.

He uses the phosphorus itself in the form of elixir, oil or pill, as the most satisfactory for the direct stimulation of the nervous system.

He closes by urging a more extensive use, with at the same time a more guarded use of this remedy in all of those neuroses and nervous troubles in which malnutrition, metabolic insufficiency and protoplasmic failure are chiefly to blame.

He thinks that the *materia medica* contains no more valuable agent, when properly administered, than phosphorus.

Penetrating Wounds of the Eyeball.

The conservative treatment of this condition is recommended by Francis Dowling in the Cincinnati Lancet-Clinic for April 14th.

Instead of removing the eye at once he treats it on the expectant plan.

He says that it is astonishing what recuperative power the eye sometimes possesses; some of the most dangerous looking wounds often terminate in recovery with fairly good vision.

He advises removal when the sclerocorneal margin is involved or when decided symptoms of sympathetic irritation manifest themselves.

In regard to prolapse of the iris, he thinks it better surgery to excise the prolapse at the start and not dillydally trying to restore it by means of atropia, eserine or other means.

He reports three cases treated by the conservative method with good results.

What to Send to the Microscopist and How to Prepare It.

According to T. E. Oertel, in the Atlanta Journal-Record of Medicine for July, we may send tumors, tissues in general, blood, sputum, urine, vomit, feces, crust and scales, hairs, puffs, cysts, and semen.

Muller's fluid he thinks one of the best general fixing agents. Zenker's fluid may also be used, but tissues do not always stain well after being fixed in it. Fixation with aqueous solutions of formaldehyde in from two to ten per cent. strength is fairly good. For the eye this is the best agent at our command and should be used in ten per cent. solution, a small nick being made in one side of the globe to allow it to penetrate the vitreous. Alcohol should never be used for preserving eyes.

Tumors of the Mammary Gland.

F. C. Hyde, in the Journal of the American Medical Association for March 31st, gives the result of a pathologic study of 80 tumors of the breast.

Fifty-six of the number were carcinoma, the diagnosis resting on the definition of an epithelial tumor, whose cells grow loosely in the connective tissue spaces without a basement membrane, growing both by infiltration and metastasis.

From a microscopic examination of these 80 cases, he concludes that there is no strictly benign tumor of the breast and that the only rational treatment is complete removal as soon as discovered.

Pericarditis.

Albert Abrams, in his fifth paper in the series on diseases of the heart, discusses affections of the pericardium in the July issue of the Medical Standard. He says that there are three characteristic signs of a pericardial effusion. 1. The apex beat located by palpation or auscultation is found an inch or two within the left border of precordial dullness. 2. The cardiac impulse is feeble and appreciated with difficulty. 3. The feeble and distant heart tones are in marked contrast with a comparatively strong radial pulse. 4. The shape of the figure of precordial dullness.

Dilatation of the heart offers the greatest drawback in differential diagnosis. The following facts are in favor of heart dilatation.

1. Previous history of valvular heart disease.
2. Absence of fever, pain and pressure symptoms.
3. The heart impulse is usually visible and wavy and the apex beat is visible and diffused. The shock of the cardiac tones may be felt.
4. The area of dullness rarely assumes the triangular form, nor does it excepting in mitral stenosis reach so high or so low without visible or palpable impulse.
5. The tympanitic tone in the axillary region owing to lung compression often present in effusion is absent in heart dilatation.
6. The heart sounds are clear and sharp and there is no friction murmur.

Fig. 3 in this article is liable to confuse the recent graduate.

The cut in question is under treatment and shows how to extirpate pericarditis by a quadrisection of the uterus.

From this we would infer that Abrams is an ardent gynecologist but we suspect the illustration was intended for the abstract of Kelly article on operation for cancerous uteri in the Journal of the American Medical Association.

Operation on the Fifth Nerve.

The Journal of the American Medical Association for April 28th contains several articles on the surgery of the trifacial.

Keen and Spiller are the writers of the first article on *Peripheral Resection*. They report three cases with microscopic examination of portions of nerves removed.

Keen is of the opinion that it is wise to do these operations until the mortality, following the removal of the Gasserian ganglion, has been materially lessened.

The second paper is by Dercum, Keen and Spillman, and is the report of two successive resections of the Gasserian ganglion for endothelioma. The first was the Hart-

ley-Krause operation and the second by the intradural method.

The case is remarkable on account of the rarity of tumors of this ganglion and on account of the persistence of sensation after the complete removal of the ganglion.

G. G. Davis describes a method of exposing the ganglion and reports a case in which the superior maxillary branch was removed.

Harvey Cushing describes a method of total extirpation of the ganglion by a route through the temporal fossa and beneath the middle meningeal artery.

Morphine Poisoning and Permanganate of Potassium.

John A. Barker, in the *New York Lancet* for July, reports a case of morphine poisoning in an infant four days old with recovery by the use of potassium permanganate.

The child took $\frac{1}{4}$ grain by mistake for calomel and soda, and it was not seen by the doctor for an hour and a half after the accident. At that time it was in a stupor, breathing only five times in a minute, marked cyanosis and all the signs of approaching death. Two grains of permanganate was given hypodermically, but it grew worse and a second dose of 2 grains was given, and in a half an hour a third dose, when signs of returning life was seen which went on to complete recovery.

The author questions whether or not better results would not have been gained by giving the six grains at one time.

He does not believe in the old-time method of flogellation, cold douching and continually disturbing the patient, but thinks it cruel and positively injurious.

He says the permanganate is the most efficient neutralizing agent yet known.

Prostatic Hypertrophy.

G. Frank Lydston, in the *International Journal of Surgery* for June, recommends total resection of the spermatic cords as a substitute for both castration and vasectomy in the treatment of Prostatic Hypertrophy. He gives the following reasons:

It produces less traumatism, a very important item in old men.

There is less danger to the kidney, because of minimized shock.

The testes not being removed, there is none of the psychic disturbance incident to a consciousness of the loss of the testes.

Cocain may be more safely used.

The subsequent shrinking of the testes is so gradual that little complaint is made.

Puerperal Eclampsia.

R. R. Kime, in the *Atlanta Journal-Record of Medicine* for July, says that veratrum viride is the safest and most certain remedy for controlling the convulsions.

At the same time it favors elimination by diuresis and diaphoresis. It should be used hypodermically in five to ten drop doses until the convulsions are controlled and it should be continued by the mouth to prevent their return.

Veratrum administered as indicated above and repeated in sufficient doses to hold the pulse near the normal range, with rapid clearing out of alimentary canal by use of calomel and salines, establishing elimination by kidneys, skin, liver and alimentary canal, put patient in most favorable condition for recovery. Emptying the uterus is, of course, an important consideration.

Tendon Transplantation in the Treatment of Deformities of the Hand.

A number of surgeons have reported good results from the use of this method of treatment in deformities of the foot, but until recently no attempt had been made to apply the principle to deformities of the hand.

Wisner R. Townsend, in the *Medical News* for July 14th,* reports three cases from his own practice and several from the practice of others in which marked improvement followed tendon transplantation.

Drop-wrist following cerebrospinal meningitis can be greatly relieved by this operation.

To secure the best result it is necessary to make a careful examination, first to determine what muscles are paralyzed and what are not. The principle is to suture non-paralyzed tendons to the paralyzed ones.

Their directions may be changed, and in this way a normal flexor may be made to do the work of a paralyzed extensor.

Careful after treatment is also necessary as the muscles must be educated to their new work.

The question of the future action of the muscle, that is, so far as the cerebral action is concerned, is an interesting one, and will be solved undoubtedly by the neurologist or physiologist.

The practical point is that with the flexor tendon attached to the extensors, when the patient wishes to extend the hand, the cases already operated upon show that the proper motion results, although the extension is accomplished by contraction of the flexor muscles.

Urethral Stricture.

W. Frank Glenn in the Memphis Medical Monthly for June favor rapid dilatation with bougie.

He says that when a drop of urine passes there is a channel and by patients effort we may find it. With the patient under an anesthetic he first passes the largest size the stricture will admit then the next size and so on until the normal size is reached. If necessary he cuts the meatus.

The advantages claimed for this plan are.

Little or no shock.

Only slight, if any hemorrhage.

Rarely urethral fever.

The very short time the patient loses from business.

At last but not least, no fatality.

In impervious stricture if it is very dense he used the urethrotome otherwise only the straight bougies. Bougies are passed regularly after cutting to prevent a return worse than ever.

Internal urethrotomy should never be performed in the deep urethra.

Perineal urethrotomy he thinks very rarely ever necessary.

Treatment of Typhoid Fever.

In the Medical Sentinel for July Elmer E. Hey tells of some of the failures of the Woodbridge treatment of typhoid fever during the late war.

The treatment was given by Dr. Woodbridge himself and he was assigned to a new ward of 50 beds.

He treated 37 cases, four died on the 8th 15th 18th and 20th days after admission. The percentage of hemorrhage was higher in his ward than any other and nearly 50% of his cases relapsed. The writer concludes that the Woodbridge treatment is not only not beneficial but is positively dangerous and should not be used.

The Brand method was also shown to be of limited value and was indicated in the strong plethoric cases with high temperature.

He says that it was in the end recognized by all that the best results, in the most cases, came from practically the old expectant plan, viz: as full a liquid diet as could be digested, as little medication as possible, watching all symptoms carefully and meeting indications as they appear, supporting heart and nervous system early and regularly when once begun, reducing only excessive temperature and that in the least disturbing way, either by sponging or wet packs. In fact, to make and keep the patient as comfortable as possible with the least disturbance

Tobacco.

T. H. Marable, in the Quarterly Journal of Inebriety for April, says that the use of tobacco is very injurious to health, especially if used in the form of cigarette smoking. This is not due to any poisonous matter in the tobacco or paper, but simply because they are cheap and therefore smoked in quantity and because the smoke is always inhaled. But the small boy is after the active principle and that is the best way to get it.

It is not using tobacco to draw smoke into the mouth and then blow it out. It has been often a source of wonder to me what enjoyment or effect one could get out of a cigar or pipe without inhaling the smoke. It is like rabbit pie with the rabbit left out. Of course, tobacco is a poison, but you can no more kill an old user with it than you can an old morphine eater with paregoric.

People who use tobacco use it for its effect and to inhale the smoke either from pipe, cigar or cigarette is to get the maximum effect from the smallest quantity of crude material.

Tumors of the Kidney.

In discussing the treatment of tumors of the kidney, L. L. M'Arthur, in the Journal of the American Medical Association for March 17th, says that the division of Grey Smith is a very satisfactory one.

Puncture, Nephrotomy, and Nephrectomy,

He says: "Puncture, nephrotomy, nephrectomy, overlap; any one of them may be indicated for the same condition, and indeed all of them may be properly performed in succession for the cure of this condition."

Renal puncture is indicated for: 1. Simple cysts. 2. Hydronephrosis. 3. Hydatid cysts.

Nephrotomy is indicated for: 1. Cases where puncture fails. 2. Pyonephrosis. 3. Suppurative nephritis and pyelonephrosis. 4. Tubercular kidney. 5. Calculous disease.

Nephrectomy should be resorted to: 1. Where nephrotomy fails, or would be useless. 2. In certain neoplasms of kidney. 3. For fistulæ. 4. For degenerated kidney.

In nephrectomy he advises that the pedicle should be clamped and cut before tying. Slipping of ligatures otherwise applied is very prone to occur.

In operating on the right side avoid traction on or occlusion of the vena cava, as even a temporary shutting off of the blood current may produce fatal shock.

Before doing a nephrectomy be sure that the other kidney is sound.

Study the clinical history carefully.

Remember that every renal operation that can be done without entering the peritoneal cavity is a safer one and should be selected.

Subarachnoid Space.

In the Journal of the American Medical Association for July 7th, Dudley Fair and Guida Cagliari give some experimental and clinical notes on the subarachnoid space.

After a number of experiments they arrive at the following conclusions:

To the already known practical routes leading to the subarachnoid space, they add the "low cervical"—in the sixth cervical space—which is both easy and safe.

The cerebrospinal fluid possesses none of the properties of lymph.

Contrary to the classic opinion, the cerebral perivascular lymphatic sheaths do not empty into the subarachnoid space. (Sicard).

Liquids injected by lumbar puncture diffuse rapidly toward the different cavities of the brain, and subsequently reach the cortex.

The difference in osmotic currents in the cerebrospinal fluid—presence of exosmosis and absence of endosmosis—in addition to the protection afforded by the perivascular lymphatic sheaths, explains the rarity of infection of the cerebrospinal fluid in the course of generalized blood infections and also the gravity of primary infections of the cerebrospinal fluid. (Sicard).

Direct intramedullary medication is feasible and deserving of further trial.

Subarachnoid injections of cocain are devoid of danger if made with certain precautions. The solution should be freshly prepared and injected slowly at a temperature of 37 C. and never in a greater quantity than 3 c.c.

The extent and duration of the analgesia thus induced is generally in direct proportion to the amount of drug injected. Analgesia is noted in some cases as early as five minutes, after the injection, and in others, for unknown reasons, as late as thirty-five minutes. Its duration is sufficient for the performance of all operations on the lower limbs and pelvis, and may be sufficient to be of service in obstetrics.

The disagreeable effects—headache and vomiting—sometimes noted after these injections, are partly due to the sudden increase of pressure in the subarachnoid space—too rapid diffusion toward the

brain—and principally to the amount of cocain used. These post-operative symptoms are never alarming or lasting. They recall the effects of intradermic injections of cocain, and never resemble in severity the symptoms so frequently observed during and after chloroform or ether anaesthesia.

One c.c. of a 1 per cent. solution of cocain injected slowly is generally sufficient for all practical purposes, and is not followed by untoward symptoms.

For obvious reasons, it is a good plan to withdraw a small amount of cerebrospinal fluid prior to making an injection.

To the careful surgeon, who aims to gradually divorce himself from the dangers of general aresthesia, and the limitations of superficial anesthesia, spinal analgesia, may, under certain exceptional conditions, prove of signal service, and it behooves us to herald abroad the fact that this progressive step was made by a modest American surgeon—J. Leonard Corning.

Uric Acid and Diet.

According to Rutherford McDougal, in the Dietetic and Hygienic Gazette for June, we should stop eating "dead" meat if we want to be healthy.

Uric acid is the bane of our civilization and the most of it is manufactured from the meat we eat.

An exception is made in favor of fish, oysters and chickens, but the red meats mean disaster and death.

We should drink milk instead of eating meat, as it answers all the purposes of meat in the animal economy without any of the bad qualities.

If we must get down to chicken and milk then people must all live in the country where these things grow in their native purity. But, as we have said before, if people ever learn how to eat the doctor will have to learn how to live without eating.

Throat Coughs.

According to S. G. Dabney, in the Medical Age for July 10th, the most frequent cause for cough found in the throat are elongated uvula; granular pharyngitis; laryngitis; enlarged lingual tonsils; hypertrophy or chronic inflammation of the faucial tonsils; adenoids.

Frequently two or more of these conditions coexist. Unless accompanied by a bronchitis, cough from the throat usually produces but little expectoration.

The treatment is directed against the condition producing the cough.

Biliary Colic.

The Hospital says that, Keay, in the British Medical Journal for April 14, makes a suggestion as to the utility of chloroform in arriving at a diagnosis in cases of biliary colic. So far as pain is to be taken as a guide the matter is apt to be complicated in these cases by the close proximity and intimate connection between such important organs as the stomach, duodenum, pancreas, liver, gall-bladder, and bile ducts, and by the fact that these organs can for the most part be only indirectly explored. Dr. Keay has come to the conclusion that the seat of pain which precedes the passage of gall-stones has seldom, if ever, been correctly described in text books, and he insists more especially upon the fact that it is felt in the back. Long before an acute attack there are generally pains in the back, often mistaken for lumbago or for some spinal mischief; but when a calculus is fairly lodged and trying to find its way through the bile ducts, the pain, he says, begins about the tenth or eleventh dorsal vertebræ, gradually passes round, and, though not quite disappearing, gives place to excruciating pain in the right, and often in the left hypochondrium, middle or lower abdomen, frequently above the left nipple, but practically never the right shoulder. Pain often begins, it is admitted, in the right hypochondrium, but it is held that such pain is due to irritation in the gall-bladder, and is not followed by the passage of a gall-stone. When a patient is suffering from biliary colic the pain may be shooting in all directions, and may be so exquisite that little can be learned regarding it. But a little chloroform, not enough to produce unconsciousness, will gradually cause the distant or referred pain to cease until there remains only a distinctly localised pain of the bile ducts.

Postpartum Hemorrhage.

W. S. Thompson, in the Medical Herald for June, says that the proper way to treat this condition is to be always prepared for it.

First, he recommends that the uterus be grasped in the hand, ergotin hypodermically, cold externally and within the cavity of the uterus.

Intrauterine injections of real hot water if these fail or alternate hot and cold. Perchloride of iron, vinegar, and tincture of iodine may be used.

When the loss of blood has been great and there is danger from collapse we should bandage the extremities and use transfusion

Drainage and Irrigation in Urethrotomy.

The Hospital says that to cut through a stricture is one thing; to get, as a result, a pliable and useful urethra is quite another affair, and there is much reason for believing that this result is affected to a considerable extent by the care taken to drain and irrigate the wound.

Reginald Harrison, writing on the subject of external urethrotomy, says the entire character of the tissue by which a stricture is repaired after it has been divided, either in external or internal urethrotomy, may be importantly determined by the nature and duration of the drainage and irrigation that is employed, and he advises that after the stricture has been divided a full-sized gum elastic bladder drainage tube should be employed, for which after a few days a flexible rubber one may be substituted. The kind of tube to be used is one made in gum elastic in different lengths and sizes, so as to fit the wound and the deep urethra with as much accuracy as a tracheotomy tube fits a windpipe. From the day of its insertion it commences to mould the repairing urethra to the dimensions required. It is readily inserted, and can be removed for purposes of irrigation and cleanliness; and when any risk of bleeding or oozing, for which side-packing might be required, is over its place is taken by a soft rubber tube with depressed openings of similar dimensions. Thus cicatisation proceeds under free irrigation up to the time of the final removal of the tube.

Pneumonia.

Louis H. Behrens, in the Interstate Medical Journal, discusses the diagnosis of pneumonia.

He reports a number of unusual cases showing how easy it is to overlook this condition unless a careful examination is made.

In atypical cases he emphasizes the following points in making a diagnosis:

Be in no hurry to pronounce a case pneumonia of special type unless you have examined patient thoroughly, both as regards objective and subjective symptoms.

Remember that no sharp line exists between the ending of a severe bronchitis and beginning of the capillary or catarrhal pneumonia.

Depend always on a physical examination as of most importance.

Children under six have, as a rule, capillary catarrhal pneumonia; six to sixteen, croupous or catarrhal; adults, lobar pneumonia.

Do not lose sight of chest exploration, if peculiarities arise in continued fevers.

Hypnotism in Therapeutics.

Sydney Kuh, in the St. Louis Medical Review for July 7th, sounds a note of warning against the use of hypnotism in certain cases.

He reports a number of instances where its employment was attended with bad results and concludes

That hypnotism is *not* as safe a remedy as other methods employed for the same purposes.

That it is *not* more active in relieving most of those symptoms or diseases for the cure of which it is used than other methods.

Since the very patients, for whom we may expect beneficial results from the use of hypnotism—the neurotics—are also most easily and most seriously injured by its use, therefore we should be doubly careful in resorting to its application.

Indications for Enucleation of an Eyeball.

Albert E. Bulson in the Fort Wayne Medical Journal-Magazine for May gives the following rules in regard to enucleation.

First, enucleation should be performed if the eyeball has been so injured as to make recovery of sight almost hopeless, and the onset of iridocyclitis almost certain. Second, enucleation should also be performed in the same case where iridocyclitis has already set up in the injured eye. Enucleation should be performed in a case of iridocyclitis, where a foreign body which cannot be safely extracted is present in the eye, even though the vision is fairly good; because, we know that here the danger of sympathetic ophthalmitis amounts almost to a certainty. Third, Enucleation should be performed in a case of iridocyclitis, traumatic or idiopathic, where vision is lost, especially if the eye is tender on pressure; for here the ball is useless and disfiguring, and apt to be a source of danger to its fellow. Fourth, Enucleation should be performed in a case of phthisis bulbi, even of old standing, when there is shrinking pain on pressure, for the eyeball here as in the previous instance is useless and apt to be a source of danger to its fellow eye. Fifth, Enucleation should be performed in a case where the sympathizing eye is already affected, provided vision in the exciting eye be lost, and hopes of its recovery slight, if any. Sixth, Enucleation should be performed in a case of sympathetic irritation, if the sight of the exciting eye is very defective and the neurosis very persistent.

On the other hand enucleation should not be performed in a case of an injured eye if

its sight is fairly good and yet no signs of inflammation are present, unless it contains a foreign body which cannot be extracted. Second. The exciting eye should not be enucleated if sympathetic ophthalmitis has already appeared, provided the vision of the exciting eye be fairly good. The reason for this is that the inflammatory process in the sympathizing eye is sometimes *not* arrested by the enucleation of the exciting eye, and where enucleation is not performed the exciting eye sometimes in the end turns out to be the organ with the better vision.

Opium poisoning in a Child.

Bartels in Munch. Med. Woch. no 5, as quoted in Archives of Pediatrics for July, reports a case of opium poisoning in an atrophic child of ten weeks.

The patient, a feeble female baby, ten weeks of age, showed the typical signs of malnutrition and the hydrocephaloid condition of ill-fed infants suffering from cholera infantum. Although put on rational treatment and dietetic management the number of the movements did not diminish. A medicine containing, among other things, a minute quantity of opium was therefore given. As the baby was very restless during the night, the nurse gave several large doses of the remedy. In response to an urgent appeal, the author saw the baby at eight o'clock the next morning and found it apparently dead. It was of a pale, livid color, felt cold to the touch, no respiration, no pulse nor cardiac action could be determined. The reflexes had entirely disappeared even from the half-closed eyes. As the appearance suggested death from opium poisoning rather than from cholera infantum, treatment for the former condition was begun at once. There was apparently no result from the routine treatment, as artificial respiration, irritation of the skin, rhythmical traction on the tongue, etc. As soon as faradization of the phrenics was started by the use of a battery sent for in the meantime, a short feeble inspiration took place. This faradization was kept up altogether for ten hours, a large flat electrode was kept over the epigastrium and a small one over the phrenic nerve in the neck. Electricity was applied intermittently and alternately on both sides about fourteen to sixteen times a minute. Even four hours after this treatment had been started there was no radial pulse, no spontaneous respiration or movement of any kind. At the end of ten hours the body began to get warm. Artificial means to keep up the body heat had to be employ-

ed until then. The reflexes and respiration returned. The baby recovered entirely from the effects of the poisoning, had no more diarrhea and thrived nicely.

Puerperal Sepsis.

John O. Polak, in the New York Lancet for May, discusses the clinical value of the modern treatment in puerperal sepsis.

The factors necessary to develop this sepsis, he says, are, a specific virus, an avenue of entrance and a constitutional condition favoring the development of the disease.

Commonly the infection is of streptococcal origin, the most fatal forms, however, are due to a mixed infection, the streptococcus, staphylococcus pyogenes albus, aureus, and citreus, the bacillus coli, pyocanicus, and fœtidus contributing their toxins to intensify the intoxication.

He emphasizes the following points:

First.—That puerperal sepsis usually begins in one of two forms of endometritis, i. e., putrid or septic. Except when the infection has been direct through the inoculation of lacerations and abrasions by the streptococcus or by the tetanus or diphtheria bacillus.

Second.—That while the curette is indispensable to the successful management of putrid endometritis, it is harmful in an empty uterus, such as is commonly found in the septic form.

Third.—That all forms of septic infection are benefited by general stimulation and supportive treatment.

Fourth.—That of the antitoxins used Ungt. Crede has proven its superiority over the antistreptococcal serum.

Fifth.—That blood-washing and the artificial production of a hyperleucocytosis are valuable adjuncts to the routine treatment.

Finally, that hysterectomy post-partum should be limited to those cases in which the sepsis is localized, as an ulcerative metritis with pyosalpinx or tubo-ovarian abscess after the acute symptoms have somewhat subsided and that most parametritic pus collections can be more safely handled by vaginal section.

Phlegmonous Angina in Children.

According to the Archives of Pediatrics for July, Katz reports two cases of phlegmonous angina in children in *Le Progrès Médical*, Vol. IX, No. 13.

The first case was one of abscess of the uvula in a five months' old nursing baby. The symptoms were those of a retropharyngeal abscess; intense dysphagia and dyspnea

with paroxysms of suffocation. Upon incision several grammes of pus were evacuated, and the symptoms ceased at once.

The second case occurred in a boy eight years of age, during convalescence from an attack of measles. There was a phlegmonous periamygdalitis, making a nut-sized tumor at the base of the tongue in the glosso-epiglottic space and causing laryngeal edema with alarming attacks of suffocation. The abscess was incised and six grammes of yellow, not fetid pus removed; improvement was immediate. Such a localization of phlegmonous angina in children is extremely rare, no similar case being recorded in medical literature, though adult cases are described.

The Anesthetizer.

The relation of the anesthetizer, patient and operator is discussed by D. C. Moriarta in the St. Louis Medical and Surgical Journal for June.

He claims, with justice, that the man who administers the anesthetic should be as competent as the operator. His knowledge of anesthesia should be comprehensive, and for his work he should receive a reasonable fee. Too often is it the case that anybody who is willing gives the ether or chloroform and the patient is the sufferer thereby.

The bulk of the blame is upon the operator. When arranging for the work he should tell the patient that it will be necessary to have a competent man for this work and that a fee is rightly his due.

This is a day of specialism and there should be an opening for a skilled anesthetizer, a man who will not become absorbed in the operation, but who will carefully watch his patient at all times. Then the surgeon can work at his ease, concentrating all his energy and attention on the operation.

Tuberculosis.

The Medico-Legal Journal for March contains an article by Thos. B. Keyes advocating camp and outdoor life as an aid to the permanent cure of tuberculosis. As has been said by someone, the people of India starve because they are too lazy to work and the people of America die of tuberculosis because they are too civilized to breathe pure air.

Carpets, subdued lights, airtight houses and artificial heat lays the foundation upon which the tubercle bacilli erects a tombstone.

The author of this paper says that it has been demonstrated that no amount of exposure to draft, cold, or wet, or change of

weather will hurt the most delicate if they will only stay outdoors.

He emphasizes the following points:

Irrigation of the stomach to cure catarrh and to stimulate the pneumogastric nerve, and to promote digestion, and assimilation.

The correction of all abnormal conditions about the nose and throat.

Outdoor life and proper exercise.

A system of overfeeding together with proper tonics.

Careful watchful supervision by the physician, to meet demands as they may arise.

Ozone generated from the static machine he considers of value.

Camp life is highly recommended for the following reasons:

It is inexpensive compared with hospital treatment.

It encourages exercise, producing much muscular development and a healthy appetite.

It affords pleasure and amusement (not afforded by indoor or Sanitarium life) and removes the patient from house surroundings with their many injurious influences, and consequences, both to patients and friends, into a healthy virgin district.

It toughens and makes the patient robust and thus helps to maintain a permanent cure.

The Organization of Aseptic Operations.

C. B. Lockwood has a paper on this subject in the British Medical Journal as quoted in Treatment for May.

He has come to the conclusion that it is unnecessary to commence the disinfection of the patient's skin some hours before the operation, but that the whole process can be efficiently carried out on the operating-table itself. He says that a comfortable night cannot be passed by a patient who has had the usual cleansing performed, and the part wrapped in a moist and unaccustomed dressing. Happily, his recent methods of disinfecting the skin, if not perfect, are so satisfactory from a practical point of view that the old method can be dispensed with, much to the comfort of the patient. He is now in the habit of having the preparation and disinfection of the skin performed an hour or so before the operation, and in the case of a lady or of a child it is deferred until the patient is under the anesthetic.

The disinfection of the skin is performed as follows:

1. It is, if necessary, shaved.

2. It is thoroughly washed with soap and water to remove all dirt, superfluous epithelium, and sebaceous matter.

3. As much as possible of the remaining fat is extracted with ether, or turpentine, or benzine; of these turpentine is probably the most convenient, and perhaps the best; it can be obtained in almost every house, and, besides being an excellent grease-extractor, has some powers of disinfection.

4. After the thorough extraction of the grease the skin is saturated for not less than two minutes with a solution of biniodide of mercury in methylated spirit (1 in 500).

Some Surgical Subjects.

Emory Lanphear, in the Alkaloidal Clinic for July, gives some practical advice on several subjects of a surgical nature.

In operating for hare lip, nevus or other condition about the face in children he advises a little cotton around each elbow and a few turns of plasterparis bandage above and below the joint for about three inches. This prevents the child getting its hands to the wound but does not interfere with the movements of the arms.

He considers the proper method of suturing an abdominal incision to be by layers.

Empyema in children may be overlooked. Every child presenting a history of cough and fever should be subjected to a thorough physical examination.

Simple incision and drainage is all that is necessary in such conditions in children.

Catgut ligatures, he thinks, are disliked by lazy surgeons. Formaldehyde gut fills all the requirements of aseptic surgery.

In chronic pelvic suppuration he likes the vaginal route best.

Operation for idiocy he condemns save in exceptional cases of microcephalus.

Cancer of the uterus, he believes, can be cured by early operation. He cites five cases living nine years after removal.

Water-Drinking.

Jonathan Hutchinson, in the Archives of Surgery, tells us of an American patient he had who drinks four quarts of water a day.

When abroad it is usually Apollinaris water, but at home pure spring water. This is not his invariable consumption; sometimes, and especially when taking wine, he does not take more than two quarts.

He never takes wine in more than very moderate quantities, and sometimes he leaves it off entirely for months together. When he does so he usually doubles his allowance of water. He is a man deeply engaged in business, and is of opinion that the water keeps his head clear; "at any rate," he says, "it makes me more comfortable." He says that he does not perspire

much, and that although he passes large quantities of urine, he is not incommoded as regards frequency and never rises in the night. He is not particularly thirsty, but finds water-drinking pleasant.

The consumption of a gallon a day of water is probably very unusual, but many beer-drinkers, draymen and the like, would probably have to acknowledge much larger quantities of their beverage. It is possible that the more free use of water would be beneficial to many. Especially it might do much to prevent the formation of stone in the bladder.

Serums.

In Pediatrics for May 15th, Antonio Fanoni has an article on the present state of our knowledge of the various therapeutic serums.

He considers the efficiency of Pane's serum in lobar pneumonia as recognized by impartial observers. In his own practice he says that he has used it with marked success in 18 cases of pneumonia, four of them being children under three years of age.

Marmorek's serum is only of partial value as it is only active against the particular streptococcus which was used to prepare it.

Yersin-Roux's serum against the bubonic plague seems active, but the results are not very satisfactory.

The serum against yellow fever has not yet been fully developed.

Maragliano's serum against tuberculosis he considers of value in the early stage.

The serum treatment of disease, like other great discoveries, has not been accepted by humanity at once, but has given rise to much controversy, but the truth is mighty and will prevail.

Tabes and General Paralysis of the Insane.

According to the London Correspondent of the Medical Fortnightly, for May 25th, an important discussion has recently taken place at the Pathological Society on the pathology of tabes in relation to general paralysis of the insane. Dr. Mott, who opened the discussion, remarked that: (1) A certain number of cases of tabes might begin with mental symptoms, or mental symptoms in the form of crisis might occur in the course of tabes. (2) A certain number of cases of general paralysis present tabetic symptoms. (3) A few cases of tabes later developed well marked symptoms of general paralysis. An analysis of statistics showed that syphilis was by far

the most important factor in the production of the two diseases. The most important physical sign in general paralysis, as in tabes, was reflex iridoplegia. Clinical phenomena, so characteristic of tabes, such as grey atrophy, ocular paralysis, perforating ulcer and Charcot joints, were also met with in general paralysis. The pathological processes in the two diseases are identical, namely a primary progressive degeneration of the neuron with secondary sclerosis and inflammatory conditions in the vessels or adjacent membranes, due to irritation, caused by the products of degeneration and a formative proliferation of the glia elements. There were many borderland cases which Dr. Mott considered formed an important link in proving the essential identity of the two diseases.

Valvular Diseases of the Left Heart.

Anson T. Clark in the Pa. Medical Journal for June in discussing this subject lays down the following plan of treatment.

The treatment must be largely hygienic. Open air, warm footwear and slight exercise. It has been recommended that we direct our patients to run up stairs and take other violent exercise, with the point in view, to increase the hypertrophy and keep up the compensation which never is kept up. All hypertrophic tissue is unhealthy tissue. From hypertrophy directly to degeneration of the muscular fiber, is the rule, and the greater the hypertrophy the sooner the degeneration. Teach them to live the half-life they are obliged to live; to stop when they are in trouble and not be frightened: to start again when their trouble has passed. Cardiac stimulants are worse than useless except to bridge over attacks of heart weakness toward the last. Let the heart alone as long as possible. The subjective symptoms demand attention and must be presented in each case.

The Leading Editorials of the Month.

Southern Rational Park.

The Medical Times says that "we are very glad to see an active movement is on foot, with every prospect of success, to establish a national park, by grant of a large area of government lands, similar to the Yellowstone Park, in the Southern Appalachian Mountains in Western North Carolina. This section of country is one of the finest health resorts in the country. It is magnificently timbered, and comprises a great variety of scenery, in which the grandly sublime is brought in strong con-

trast with the beauty of the most charming landscapes. An important official in the United States Agricultural Department says of this location, "Every sort of North American animal or fish would thrive here, and almost every tree or plant within our borders from the Atlantic to the Pacific would grow uncared for. Here is a region where winter lingers not; the mountains swell with life at the breath of early spring and clothe themselves in garments of emerald leaf and many-tinted flowers; summer sunshine wraps the earth in lustrous woodland, changing to royal robes of autumn splendors of purple and crimson and cloth of gold; transparent waters of creeks and rivers glide and dance and foam over their rocky beds; above them as an arch the arms of the giant forests, on their banks the honeysuckle, the violet, the tiger-lily, the ivy and the laurel breathe perfumes as sweet as the odors of the lilies of eternal peace." The medical profession most heartily indorse the idea of a national park in this locality. Its glorious climate and magnificent scenery will bring back the vital force and the mental poise which drugs will fail to reach. As a sanitary resort it can be easily reached from all our Eastern homes, and will probably be as highly beneficial in most cases as the higher altitudes of the Rocky Mountains."

A Consultation Hospital.

The Hospital says that it is the boast of London charity that, in the presence of sickness, the difference between class and class is largely wiped away, and that by aid of the hospitals the poor as well as the rich have at their service all the resources of medical science. Yet, in the long list of medical charities there has been a gap, for no attempt seems to have been made until quite recently to provide for the poor those "consultations" and "second opinions" which form so important a factor in every day practice among the rich. Charity has seemed to expend itself upon treatment, and the out-patient departments of the hospitals to be dominated by the ever-present necessity of prescribing bottles of physic for an untold number of trivial cases. We know, of course, that to any suggestion to open a purely consultative department the objection will be raised that consultations are luxuries, and that patients who are able to provide themselves with medicines, and probably with the attendance of a medical man, are not objects of charity, and are, therefore, outside the sphere of hospital work. It may be doubted, however, how far it is just to draw so distinct a line be-

tween the fit and the unfit, or to lay it down that a man who can pay a general practitioner has no excuse for coming to a charity when he wants the aid of a consultant.

No doubt in the beginning hospitals were established for the succor of the absolutely destitute. But that era is in this country long since past and gone. Since the establishment of the Poor Law medical service, the continuance, the very existence even of the hospitals, is an admission that in sickness the poor cannot be divided by a strict line into paupers and payers, and that charity may properly give luxuries during illness to those who in health would not be fit objects of charity at all. The old definition, according to which a fit case of hospital treatment was one who was "unable to pay for medical attendance," has become to a large extent meaningless, seeing that anyone who is really unable to pay for medical attendance can have it supplied for nothing by the Poor Law authorities. The modern definition has come rather to be "a person who is unable to pay at the ordinary rate for the sort of help which his case requires," and according to this definition the patient whose case requires a consultation is just as much a fit "object of charity," as the one who requires an operation, or as the other to whom medicines are given with so liberal a hand. Few people who have not gone into this question have any idea how large a number of people there are who, while quite able to pay for ordinary medical attendance, either in the usual way or on some "provident" plan, are yet quite unable to pay the fees of the consultant. When this is recognized it becomes obvious that in going to hospitals in the hope of getting the opinion of some great man these people are not altogether and entirely "sponging on the charity," as some would have it. The hospital system probably forces them to carry away a bottle of physic; but what they want is the "opinion," and in trying to get it they are but doing in regard to consultations what is in practice generally admitted to be allowable in regard to surgical treatment—accepting as a charity what they cannot afford to obtain by payment. Unfortunately, while the patient who requires treatment finds all comfortably arranged for him, the one who asks only advice has to go through many troubles, and even then may fail to obtain the thing he seeks. He may no doubt get thoroughly examined, although not always by the great man he hoped to see, and no doubt also the bottle of physic given to him is a very good one; but that is not what he wanted.

It now seems as if this difficulty would be partly met, and this gap in medical

charity would be to some extent filled up by a purely consultation hospital which has lately come into being under the name of the Polyclinic. Ostensibly, it is a medical college, having for its object the promotion of medical study among medical men after they are qualified for practice. It is well equipped, and, as the Polyclinic, the monthly journal of the institution, shows it is already doing very good work. But it is something more than a college, and in its more recent development it is tending to become almost exactly the sort of consultation hospital, the lack of which forms, as we have said, a gap in the medical charities of London. The passport to its out-patient department is doubt as to the nature of the case, or rarity of the disease suffered from. Out-patient recommendation forms are now given to subscribers, as in the case of ordinary hospitals, but it seems to be the hope of the governing body that the majority of the patients attending will be sent up or brought up by their own medical men, and this will no doubt be the case when medical men discover that they can thus obtain for their poorer patients, and, be it added, for themselves, the same advantages in regard to a "second opinion" as their richer patients obtain by payment of fees. The only condition that is laid down seems to be that every case shall form the subject of a demonstration before the class of medical men attending the college. Perhaps it may be true that the primary object of giving these free consultations by eminent men is to get together a clinic of rare and interesting cases for teaching purposes. But by the very necessity of the case these consultations are becoming a large and important part of the work of the Polyclinic, and thus, by dint of its work meeting a well recognized but unfilled want, the institution is drifting into the position of a medical charity as well as a mere medical college, and while no doubt the teaching side will be well supported by the profession, it seems not unlikely that the charity side may assume such proportions as to make it appeal to charitable givers on the same basis as an ordinary hospital.

To Irrigate or Not to Irrigate in Inflammation of the Peritoneum and after Abdominal Operations.

There is still a wide diversity of opinion among surgeons as to the value of irrigation after surgical operations and in inflammation of the peritoneum, says Medicine. Many operators believe that intra-abdominal work should follow the same rules that are applied to surgery on exter-

nal surfaces. The peritoneum is surgically regarded in the same light as the skin, they both having epithelial coverings. Incisions into the peritoneum are to follow the same rule as incisions into the skin, and after the removal of organs or plastic work within the abdomen the incisions are covered in by this membrane, which is to be carefully sutured. With an aseptic technique and field, such a conception of abdominal surgery is an ideal one. An operation which leaves carefully approximated peritoneal surfaces and the abdomen perfectly dry at the time of the closure of the external wound, leaves nothing to be desired in the aid of the healing process.

The conditions that confront a surgeon in a septic case, or one in which the inflammation has extended to the peritoneal surfaces, are quite different. Here the question of irrigation is still *sub judice*. Many operators are of the opinion that if the infection is of sufficient severity to have extensively involved the peritoneum, irrigation will be of no value, and, on the contrary, may do harm by diluting and spreading the infection to previously uninvolved portions of the peritoneum, and may actually aid in the absorption of toxins from the peritoneal cavity. Other equally good operators are of the opinion that irrigation does get rid to a certain extent of the infecting agent and ptomaines, and the products of bacterial growth are washed out of the abdomen.

Unfortunately, the question is one to be decided largely by the experience and opinions of individual operators, as it seems almost impossible to study it from an experimental basis, and the examination of statistics presents so many extraneous and accidental conditions that figures based upon these alone are exceedingly fallacious. So far as conclusions may be drawn from the published cases, we feel safe in asserting that aseptic operations should be conducted without flushing and without drainage. In those in which there is a general infection of the peritoneum from a suppurating focus, or in which the operation is made for the purpose of relieving septic peritonitis, it is probable that flushing and drainage is a material aid in the recovery of the patient. The flushing, if done at all, should be thorough; that is, in a wide-spread septic peritonitis, if it is to be of any value, it must not consist of the pouring of a few quarts of water into the abdominal cavity and allowing it to drain away, but it should be done with many gallons of aseptic normal salt solution. There are now a number of cases on record in which some form of continuous irrigation has been employed with

success. There is great need of further studies along these lines, as the treatment of septic peritonitis from the operative standpoint does not form a brilliant chapter in the mortality records.

Membranous Enteritis.

The Cincinnati Lancet-Clinic says that this obscure affection has trifled with the best feelings of the members of our profession under various guises: mucous colitis, tubular diarrhea and various other combinations; whatsoever the name, it has always been characterized by the persistency with which it defies therapeutic authority. Clinically, it has been recognized by the appearance of mucus in greater or less quantities in the stools at periodic intervals. That it has been known for many years is evidenced by the description of some of the older writers—indeed, those of several centuries ago—of “the passage of the inner membrane of the intestine.”

While the disease has been known so long, the number of cases is not large, and men in active practice may pass many years and escape the unpleasant duty of treating a single case. The disease is much more common among women than men, and particularly in those in whom there is some nervous taint; indeed, it has been authoritatively stated that neurasthenia is always present. The radical statement that, conversely, all cases of neurasthenia are afflicted with membranous enteritis to a greater or less degree, is probably in advance of the fact. Of some interest is the association of the trouble with various disorders of digestion, and it is especially important to note its occurrence in connection with enteroptosis of high degree.

The symptoms of the disease are followed closely in almost every instance, and are easy of recognition. The sudden onset of severe colicky abdominal pain, with the passage of mucus in the stools, the latter accompanied by tenesmus, is constant. The mucus may be in small flakes surrounding the fecal mass, may exist in larger masses like frog-spawn, or the passage may consist entirely of mucus arranged in tubular form. Symptoms indicative of sympathy on the part of the stomach, such as anorexia, nausea, sometimes vomiting, eructations of gas, and a feeling of pain in the gastric region, usually accompany the attack. These evidences of a perhaps acute dyspepsia are not complicated with fever, as a rule. The attack usually lasts from five to seven days, and often during the interval the victim is distressed by constipation and digestive disturbance; the nervous

symptoms also persist during this time. That the masses that appear in the stools are unquestionably of mucus can be demonstrated by the following test: fixing first in alcoholic sublimate solution and then staining with the ordinary tri-acid stain of Ehrlich; the green color that appears indicates mucus.

The treatment is a mile-stone pointing to a most brilliant advance in modern therapeutics. Until a very short time ago the intestine was flooded with astringents and irritants, of which nitrate of silver was the favorite; various possible and impossible dietaries were arranged and strictly adhered to, all without success. It remained for Kussmaul and Fleiner, in 1893, to advocate high enemata of olive oil, and brilliant success has followed this simple method. Having cleansed the intestinal tract by means of a high enema of soap and water, from four to eight ounces of the oil are injected as high as possible. Most patients are able to retain this over night, and even part of the next day; if not, the remedy is reduced in amount to accommodate the capacity of the gut. These enemata are given daily for several weeks, after which the intervals are gradually lengthened until perfect cure results. The diet is such as common sense would suggest for any individual whose vitality is vastly below par. In addition, the patient should receive the best possible attention in regard to hygienic arrangements, and the maintenance of general functions.

Just how the olive oil acts, it is difficult to explain. Einhorn, regarding as he does that one of the principal factors in the formation of mucus is a spasmodic contraction of the muscular tissue of the gut, suggests “that by means of the oil the intestine is not left in an empty condition during the night, and that thereby this spasmodic contraction is avoided.” If this explanation is the true one, and coming from so great an authority it must receive the most respectful consideration, it would explain why nitrate of silver and the other irritants have been used with so little success—indeed, in many instances to the positive detriment of the patient.

A Mark of Progress.

One fact of enormous importance that has been developed by the widespread discussion concerning the proper treatment of infantile diarrhoea is, that it is positively harmful to administer food until the very acute inflammatory condition of the gastrointestinal tract has subsided. In these cases the mucous membrane is swollen, congested, covered with thick, tenacious mucus and

the fermenting products of food decomposition. In such instances food acts as a foreign body and therefore aggravates the existing conditions. The first rational step in treatment is to check intestinal fermentation, allay congestion and favor the healing of the ulcerated intestinal mucous membrane. Gray's Glycerine Tonic Comp. accomplishes these objects in a surprisingly short time because its ingredients have a selective specific action upon the seat of inflammation. Administered early in ordinary forms of catarrhal enteritis it will frequently prevent the progressive development of the more severe and intractable forms of the disease.

This remedy paves the way for the successful administration of intestinal astringents: it removes the foreign materials covering the mucous membrane so that astringents have an opportunity of coming immediately in contact with the diseased surface. After the acute period of the disease has subsided, Gray's Glycerine Tonic Comp. can be confidently relied upon to repair the waste of tissue and energy occasioned by the disease.

The Public-Holiday Question.

Every worker, be it with brain or hand, requires occasionally a change, says the Medical Record. Indeed a break in the monotony of every-day existence and a cessation, however brief, from toil and worry are absolutely essential to the health of those who live under the high-pressure conditions of this twentieth-century age. Time was when civilized life was not so strenuous as now, and when, in the opinion of many, the manner in which men passed through their earthly pilgrimage was more in accordance with the laws of nature and the rules of common sense. But even in the far-back days the necessity of a periodical term of intermission from labor was clearly recognized, and thus it came about that—putting aside the religious aspect of the question—the Mosaic law appointed for the Jews one day of rest in seven. The strain placed upon the mental and physical resources by the exigencies of our present-time mode of living have rendered more frequent and more lengthened intervals of relaxation indispensable.

These remarks apply with especial force to brain workers, and if such a course be not pursued a complete collapse of the vital powers must be the inevitable result. However, it is not only those who use their brains to an excessive degree who stand in need of recreation from time to time, but also those unfortunates who are cooped

within the four walls of a factory or store, or condemned to sit upon an office stool ten hours in the day throughout the week, and who in too many instances earn scarcely enough to keep themselves and family from the grip of want. These are the people who are really deserving of the most sympathy and for whose benefit public holidays were mainly instituted. The presumable object, then of a holiday is to recuperate exhausted energies and to relieve the sameness of ordinary daily life, and the outcome anticipated is that it will fit a person better to fulfil his duties. In fact a holiday may be rightly designated as a requisite safety valve.

In the case of public holidays there is a serious doubt if this result is often attained. Rather than being utilized as a means of gaining health they are, it is to be feared, more frequently made the excuse for indulging in disgraceful orgies, with the consequence that instead of being invigorated by his outing the worker returns to his appointed task with aching head and impaired digestion, a sadder if not a wiser man. Of course among the young of this class released from grinding toil on such rare occasions some exuberance may be forgiven, but when this superfluity of animal spirits is caused by an over-indulgence in strong drinks and takes the forms of obscenity and of objectionable horseplay, the questions may be fairly asked whether public holidays are an undeniable good or whether they are as beneficial as their founders expected to that grade of workers for whose especial behalf they are instituted. It must not be supposed that in saying this there is any intention to rail against public holidays; it is only against their abuse that a protest is made. With the advance of education, with a wider knowledge of sanitary laws, and above all with the creation of better homes, will come a more intelligent understanding of the advantages to be derived from spending the public holidays in a rational and healthful manner.

The Pregnant Woman.

According to the Interstate Medical Journal, a man born with hysteria is only half alive, since his existence becomes one continual need. Man's inherited thought, backed by hysteria and suggestion, make one of life's most pitiful and miserable objects; for suggestion in such person is easily able to create innumerable miseries and pains, since in the mere process of living he is compelled to wage an unceasing war with existence through the influences of his heredity and its abnormal suggestive mo

tive. Truly, the web of such a man's life is of a mingled yarn of heredity and suggestion, which becomes the actual stalking of an ancient vice in the present living.

Heredity is an active moulding and determining factor of living earthly existence and as such is a force as deeply inground as the very stroma of the living cell. Hence be it for weal or woe, inheritance in man is a most powerful and all-controlling element. That men die as soon as they do is not from disease alone, but from an inherited acting suggestion. Man's pain, as a general thing, is only dangerous from its inherited suggested factors. A man assailed by the full force of a vicious inherited suggestion is certainly very close to death. The inherited fatal element in a vast majority of functional troubles apparently arise in and come oftentimes from hysterical suggestion.

The limit and the power of confidence or faith when deeply wrought in man's brain has never been tested in its entirety. Because men die at certain ages this fact has been handed down by inheritance, and it is fated that the suggested period or trouble is always in evidence to make it so. There is no reason why the average life should be hedged in as it is, except for the eternal forcible reason that heredity has stamped it so. The deep elements of many of man's most serious troubles are seemingly rendered fatal only by mental suggestion, since it is demonstrable that destroying lesions are rarely present. Substance, as a general thing, is an honest factor, and apparently has it in the least of danger to man. It is the unseen and intangible factor which is life-robbing, since it operates unseen, and cannot be prepared against. In man, like Mercutio's wound, suggestion is sufficient; it needs no more, it needs no less, it is enough, and the man is dead. There is in man's mind a touch of the Supreme, but man is incompetent to grasp and to nurture it. There is in man's mind, if he could but find it, a benefitting force beyond all powers of nature. There is in man a rectifying power for vast processes of evil, but man cannot reach this, since heredity and suggestion throttle investigation.

While the world knows that woman, when pregnant, carries within that which may be moulded into a being of virtue or a thing of vice, yet it will permit her to be surrounded with influences favorable to warped mentality. The writer has read volume after volume of how laws might be devised to rectify evils, and of the damaging effects of defective mentality, particularly in the degenerate; read suggestions

indicating how education might be of avail; read innumerable suggestions this way and that way, even indicating that it were better to ruthlessly slaughter the markedly degenerate for the benefit of the living. We maintain in the deepest honesty that man has it in his power to lessen many of the harrowing elements of heredity through wise disciplined purpose, through just, humane, merciful and considerate laws.

Woman, when pregnant, is in her most natural and her most holy state. It is a period in life which is fraught with deep circumstances, which may either curse or bless humanity. For ages man and woman have begot children, and in the fixity of conditions it has run unchanged, almost unnoticed and void of that deep consideration which might lead to humane, merciful and grandeur progress.

Each pregnant woman should become the honest concern of the most sincere consideration of every nation, State, or individual man. If mental impression upon the bearing woman blesses or curses progeny, is not here the factor which even the grandest statesman that earth ever saw should eagerly and willingly give his highest and best consideration? At the risk of being considered a dreamer, the writer maintains that any woman who should become pregnant should at once become the deep concern of State and community. Laws should be devised so that surroundings may be arranged in their most beneficent manner to influence a coming mentality. If possible, *no woman should be permitted to bear children amidst surroundings of squalor, vice and want.* Realizing the enormity of the question, we feel incompetent to suggest, either efficiently or broadly. We are convinced that the pregnant woman should at all times be the watchful care of State, community and individual. There is every reason why this should be so, since from such course must come a bettering of elements in forthcoming progeny. Let it be a dream, still it is a dream which ennobles and refines the soul and fills it with the highest hope of humanity, mercy and progress. Instead of endowing universities, educational institutions, etc., with millions on millions, give some of these millions so as to take from want, squalor and crime its influence on the forming soul, for age upon age it is indicated to us that vice obtains its deepest perpetuity because the pregnant woman becomes a slave to her surroundings and in her most impressionable period stamps upon her coming progeny the reflex of viceful surroundings. Man eternally must have the full force of cursed viciousness perpetuated just so long as cursed

viciousness in surroundings are not corrected. Yes, it would pay the State, it would pay each individual soul in far nobler, grander and humane benefits to make the pregnant woman the kind object of consideration by surrounding her with that which suggests purity, kindness and humanity.

We know that woman as at present situated will continue to bear children subject to the influence of her surrounding. Ages have demonstrated this, and it is as fixed as life itself. The foundation of every State must consist in the education of its youth. In the formation of the child in utero the State's concern should begin, since this is the most impressionable period in life. If the rate of a nation ultimately depends upon the strength and health of its population then certainly the nation's care should start in the very commencement of existence. The most successful legislator is he who has been most self-abnegating and humane. Noble motive in legislation can easily become public good. It is a sad fact that the preponderance of law, yes an immense preponderance of law, is formed for the vicious; but it were better still if the good were considered, for even the good do not know what is best for them. There is an eternal soul affinity in all good men when the consideration is the bettering of humanity and country. Law, as it now stands to the great masses of mankind, is a thing of punishment, not a correcting mercy. No State can obtain the love of the people which only indulges in punishment. There must be benefit. The aim of humanity is progress. The bettering of a single soul should be the common concern of all. Then how can it be better improved in the progress of man than through the pregnant woman? Woman's sphere is limitless. She is the formative matrix for good or evil in any community, the very foundation, we should say; really the sound foundation for educational force. Better the pregnant woman and you better coming progeny. The attentive study and care of the mother will more than bless humanity; it will redeem it. As life is now lived so has it progressed. Life cannot be materially bettered except through its common source, the mother. In any State or mass of people the mother is essentially the relative source from which that State or community obtains its citizens, and in them the immediate and inactive element of vice and virtue. A vicious and inferior mother appears competent to control in most cases the character of progeny even though there may be virtue in the man.

In any event, the mother is the principal moulding agent, hence should receive the

deepest thought and consideration. You may better a man and still not better progeny, but woman bettered becomes a sure power in the bettering of offspring.

Treatment of Tuberculosis with Cinnamic Acid.

The Journal of the American Medical Association says that according to current conceptions on the subject of tuberculosis, any plan of treatment, to be successful, must be directed to the improvement of the general nutrition, to the stimulation of those forces, as yet unknown, capable of repelling the invasion and of resisting the activity of the tubercle bacillus, of neutralizing its effects and of repairing the injury it has accomplished. The mere presence of this bacillus does not constitute the disease, which rather represents the reaction between the micro-organism and the tissues that have become susceptible to its attack by reason of depraved nutrition or other expression of impaired immunity. Many remedies have been proposed for the treatment of tuberculosis, but none has a specific influence, if we except tuberculin, and this has proved itself a two-edged sword. Among the drugs that have been recommended in the treatment of tuberculosis and from which encouraging results have been reported is cinnamic acid. This remedy was first advocated for the purpose named, by Landerer, some eleven years ago, on the conception that it antagonizes the development of tuberculosis by causing reactive inflammation about the unvascularized tubercles. Subsequently its action was attributed to its chemotactic and leucocytotic properties, and finally it was considered a natural protective substance. Whatever the mode of action of cinnamic acid, it has been contended that it is capable of curing experimental tuberculosis in guinea-pigs, although it is admitted that from this it can not at once be concluded that a similar result will be brought about in man. A large number of observers have employed the remedy clinically, and have attributed great therapeutic activity to it. Fraenkel has, however, subjected the published statistics to a critical analysis as an outcome of which he expresses the opinion that the results are really no better than those that follow other methods of treatment. Further, he reports the results obtained in the treatment of ten cases of pulmonary tuberculosis, two of laryngeal tuberculosis, and five of lupus by means of cinnamic acid, at the clinic of Professor Erb in Heidelberg. In all but two cases the medicament was injected into a vein of the forearm, beginning with a

dose of 1 mg. and increasing by that amount every second day until a dose of 10 mg. was reached, then increasing 2.5 mg. but never exceeding 25 mg. The results, however, were not satisfactory; nor were those obtained in experimental observations on animals.

The Ideal Specialist.

The St. Louis Medical Review in discussing this subject, says: There has always been much discussion about specialism, and its advantages or disadvantages. There is, however, a side of the question which has seldom been touched. Specialism is no longer a question of volition as much as it is one of necessity. To call oneself a specialist is no vainglorious thing, nor one that particularly magnifies the individual's importance. The average mind which has a certain sense of thoroughness and a love for exactness cannot be otherwise than a specially trained one. It is more often an individual trait that makes a specialist out of a practitioner than a definite wish or desire. Such a mind united with a certain courage and a belief in the subject makes a specialist.

Those who wish to pose as a specialist, and who have a sufficiently elastic conscience, form a great class of "leaner." To them it is sufficient to be known as specialists by their patients, and in no sense specialists by their medical brethren. They have "leanings" towards various things, such as gynecology, laryngology, neurology, and other lines; and from those leanings they build up their special knowledge and their more than special practice.

What in point of knowledge is necessary for the ideal specialist? First of all, such a man should have special knowledge of a subject far above what a busy practitioner can obtain from any extract or compendium; in other words, first-hand knowledge, which must be stamped by individual thought. Second, whatever the subject is, the anatomy, physiology and pathology must be acquired by persistent work on this subject. This means, as a rule, long years' work in a laboratory where the painfully acquired facts are brought together. Third, abundant clinical experience in the special line of work. Fourth, a knowledge of the work that is being done, and that has been done, by workers all over the world. To acquire this best a knowledge of French and German is almost a necessity. Fifth, sufficient time to devote to each patient, so that this specially acquired knowledge may be used to advantage in each particular case. Sixth, a comprehensive knowledge,

the deeper and better, of medicine in general; and, finally, a belief and an enthusiastic interest in the specialty which will make the routine and the tedious round of special work more of a pleasure than a task. The deeper any specialist studies, the more hopeless it is to get outside of it; and the more serious the specialist is, the less of a debatable question specialism becomes.

The Doctor and Politics.

According to the Vermont Medical Monthly it seems to be a pretty general opinion that the doctor should keep aloof from all political matters. To the great majority, medical men are on the outer edge of everything concerning human living and every-day life, except disease.

All matters pertaining to health and its maintenance comprise the province of the physician. Beyond the confines of the human body and its deviations from normal he cannot go without bringing down about him storms of disapproval and criticism.

Now this ought not to be so. Are we less capable than ordinary men? Have we not the essential capacity to grasp the questions of the day? Are we not as open to conviction and as able to defend our views as other men? Certainly we ought to be, and if any class on earth should possess the necessary attributes to take a leading part in solving the economic questions of the community, it is the medical class. Every medical man irrespective of his ability as a physician or surgeon, from the discipline of his training and work, is far above the average man in intelligence and mentality. The light in which he sees humanity gives him a knowledge of human beings possessed by no other class. He knows the people with whom he comes in contact and because they realize that he knows them, they unconsciously hold him in respect. This is only natural, for the people who have the confidence in a physician which leads them to entrust their personal case in his care, are bound to have confidence in his ideas generally. Hence if the physician sees fit and is a broad, honest man with a reputation for these characteristics, he has it in his power to mould public opinion to no little extent.

But the profession itself is to blame for the little influence held in public matters. We all have felt that even to declare our politics would hurt us in our practice in certain quarters, and for us to engage in political controversies was a sign of little practice and a confession of weakness and depravity. As a consequence, medical men have had less influence in shaping public

questions than any other class. In matters of legislation we have had no voice and it is only recently that the people through enlightenment and the efforts of a few courageous physicians have come to realize that certain medical questions bear an important relation to the State. In plain every day language we have shunned our duty and neglected our opportunity. Assiduously and for selfish motives we have kept ourselves "on the fence" and the ultimate result has been detrimental to our professional interests and manhood. We have decried the open battle of politics but have kept up a guerrilla warfare among ourselves. Therefore, because of the ridicule and contempt to which we have exposed ourselves through lack of political decision and courage, we have not the influence, personal and as a class, which we ought to have by right of mental fitness and numbers. The blame rests nowhere but on ourselves.

It is not necessary for us to go into ward politics to develop influence. We do not need to become politicians in the common acceptance of the term in order to show our position. But when a public question arises we can express our opinion openly and candidly. We can give the matter thought enough to form a conclusion on the merits of the question and defend our opinions whenever the necessity arises.

Men will know where we stand and respect us accordingly. A few may taboo us because of our differing from them in political matters, but the intelligent class will measure our worth both as men and physicians, by the force of character which we demonstrate in standing by our honest convictions.

War.

The Cincinnati Lancet-Clinic takes the following hopeful view of war: A couple of years ago the theme of world interest was centered in the war between the United States and Spain. The conflict was of short duration and fortunate termination. Then came the war in South Africa between the Government of Great Britain and the South African Republic, which seems to have neared a termination that must be satisfactory to England. This event has hardly closed until the trouble with China and the recognized nations of the western civilization are in a war that threatens to be of the greatest magnitude.

In a recent issue the character of the so-called Boxer movement was portrayed. The magnitude and gravity of the situation has increased until an impression is given that the war is likely to become one of races—

the Caucasian arrayed against the Mongolian. Numerically there are no great odds, with versatility of resources on the side of the Europeans, while the seat of war is most favorable to the Asiatics. The latter are in a position of wanting to be let alone. The whites are the aggressive factors, and have their bases of supplies several thousand miles from the field of action.

War is always a serious measure and *derrière resort* in the antagonisms of nations. This serious condition is immensely magnified when oceans intervene, and the whole world's shipping is pressed into an army transport service. For a score of years the Caucasians have been building battleships and cruisers at a rate that is difficult of comprehension and expenditure of funds that is fabulous. The clash is in the air. Troops and transports are under way. There is an abnormal activity of normal conditions. The strain is not unlike an acute infectious fever with an unreachd climax. War actually exists without a formal declaration to that effect. Just what the results will be are not easily foreseen. An ability to organize and utilize are questions confronting that empire. In these questions are centered the strength of that or any other people.

Fanaticism and fatalism are terrible foes to encounter, and they are to be met in China. No man can peer very far into the future, but it looks very much as though science in all of its branches has been active in a preparation for the occasion. Smokeless powder, armor plate, Mauser guns and the men behind them. Nor has the medical profession been idle. Bacteriological science demonstrates new methods of treating wounds and disease, separating false from true causes and effects, apparently unconscious of an actual preparation for a hand in the war of races now begun.

Two years ago last April Spain was boastful; a year ago she was humble, and had lost an empire of a dozen millions of people and the fairest islands in the tropics. To-day the Philippines are a permanent base of action for American troops in China, and from being a continental nation America is reckoned as a world power of the first magnitude. America and America alone secured from other European nations an open door for commerce with all European powers, which gives a position the most favorable of all in any outcome of existing complications. Assuredly China will become an open empire, whether in a whole or fractured condition, which in turn means an opening for tens of thousands of American and European physicians; whatever else may happen, the doctor and missionary will get there.

Another thing: During the last score of years, apparently in co-operation with science, there has been a perceptible getting together of all Christian denominations. Religious acrimony has given way to fellowship, and this war with China will result in unifications of a permanent character. The blood of the martyrs, as of old, will continue to be the seed of the church, and it is possible that religious denominational barriers will melt away as snow and ice in the summer sun.

Out of the war with Spain great good has already come to the world, and so similar results will undoubtedly flow from the war in South Africa. So now even greater good may be confidently predicted from the war in and with China.

Pain as a Symptom in Appendicitis.

Unless one is very careful in eliciting from the patient the amount of pain and the location of it in appendicitis he is very liable to be deceived, according to the *Cleveland Medical Gazette*.

The patient usually has no fixed place in the abdomen to which he refers his pain, or, if he has, usually refers it to the umbilicus; and the umbilicus seems to be the place about which centers the pains and aches of nearly all the abdominal troubles in the average patient. The physician, in making his examination, should palpate the whole of the abdomen several times before he forms his opinion of where the greatest pain occurs; and in case the patient has appendicitis, he will find that while in the beginning the patient complains of pain all over the abdomen and apparently as great in one place as in another, yet on repeated palpation the greatest pain is over the McBurney point. But two things must be kept in mind. First, that pain over the McBurney point can be produced by something other than appendicitis. A typhoid ulcer in the appendix has often been regarded and treated as a primary appendicitis, and this has happened not once but many times. The great abundance of lymphoid tissue in the appendix and the fact that typhoid infection occurs through this tissue makes this a field particularly prone to typhoid ulcer. Keen in his "Surgical Complications of Typhoid Fever" states that in all cases of operation for perforation from typhoid ulcer the surgeon should examine the appendix with the view of removal, if diseased. Again, a beginning psoas abscess has fooled the very elect. But it is the absence of pain over the McBurney point that will obscure the diagnosis more than anything else. The appendix is a long and

sometimes freely movable organ attached to the cæcum by its base and meso-colon. It is from three to six inches in length normally, but at times is so abnormally long as to reach almost any part of the abdominal cavity. It has been found under the liver, on the left side, in the posterior cul-de-sac of Douglas and is even so long sometimes as to project through the inguinal canal with a hernia, as the writer has seen on one occasion, the appendix being removed through this unusual opening and radical operation done.

Pain is a constant symptom in appendicitis. But one must not expect to find it always in the right inguinal region. Considered in connection with rigidity of the abdominal muscles and particularly with the conditions found on palpation of the appendix, a diagnosis can in the great majority of cases be made, particularly when psoas abscess and ureteral colic are excluded. But too much dependance ought not to be laid on this one symptom of this disease, and it ought to be considered always in connection with the other symptoms if accuracy in diagnosis is to be attained.

Antivivisectionists and the "British Medical Journal."

The Journal of the American Medical Association says that a peculiar libel suit against the British Medical Journal has just been decided in London, in favor of the defendant. One Adams, the editor of an antivivisection publication, discovered a "mare's nest" in a government report, and thought he could make a point against experimenters in that they had, as he supposed, obtained authorization for experiments on animals without anesthetics, but had employed them. He wrote to the Home Secretary in regard to the matter, and received a specific reply that he was mistaken as to facts. Not satisfied with this, he sent an insulting circular letter to the gentleman mentioned in the report, and a number of others, inferentially charging them with bad faith or incompetence in obtaining certificates authorizing experiments without anesthesia and afterward using it, and saying that he should accept their silence as assenting to the accuracy of his inferences. This communication, of which it was said by the trial judge in his summing up that "a more impertinent letter never written by one man to another," was sent out to over seventy gentlemen, forty-one of whom had no connection whatever with the experiments referred to. A copy or copies of it naturally came to the hands of the editor of the British Medical Journal, who, in

what appears to us to be exceedingly temperate comments, mentioned the writer as an "irresponsible editor," which was the basis of the libel suit just concluded. The evidence showed that the reports and letters were easily understood by any one who wanted to understand them, and that there was no reason for the inferences drawn except the desire to find fault. There are several strange features in this case: one, that this editor, who, as the evidence shows, was by no means careful as to imputations about others, should have felt himself libelled by the extremely temperate criticism of the British Medical Journal. As the judge remarked, the difficulty in dealing with the case was because the defendant was not the plaintiff, and the whole proceeding is perhaps an illustration of the general state of mind of these, especially self-righteous zoophiles. Another feature illustrating this and their methods is the fact that, failing a charge of cruelty, he made one of bad faith, fraud, or ignorance because giving pain was avoided. This antivivisectionist was certainly hard to please. It is not always fair to judge a class by one of its representatives, but this is only an extreme case, if it is that, of the unusual methods of the antivivisectionists. This is a general family likeness in them; they are all too ready to distort facts, and employ the *suggestio falsi* on the very slightest basis of inference. The petty malignancy shown in the course followed by the plaintiff in this suit is still another evidence of what numerous other facts have illustrated in the past, that excessive zoophily exists often in inverse ratio to philanthropy.

Physician's Right to Refuse Calls.

The lay press in Great Britain and in this country has been recently handling the old theme whether a physician has the right to refuse to answer calls, says the Journal of the American Medical Association. A London coroner's jury, it seems, denounced as inhuman the action of some doctors in refusing to attend a case, and the papers followed its lead. A prominent American journal admits the legal right of the physician to refuse his services, but says that more is expected from him than from the ordinary tradesman, and that we look for some spirit of self-sacrifice from the medical profession. The doctor, according to popular notions, must give his services wherever wanted and all times, without regard to his own personal comfort or welfare, and his refusal is counted as inhumanity. This is a satisfying sort of self-righteousness, easily

assumed, that disposes of other people's rights so freely. A physician has as good a right to refuse to answer a call for his services as has a mechanic or a lawyer, and if he has good reasons, such as fatigue or overwork, no just charge of inhumanity can be made against him. He has also as good a right to refuse to work for nothing as any other man, and it would be better for the profession collectively if he oftener availed himself of this right. There is no profession that does as much for charity as the medical, and this is true to such an extent that a large section of the public has come to regard what is thus done for them as in the natural order of things and deserving of no acknowledgement. No one wishes to see any moral deterioration or increase of commercialism in the profession, and, indeed, there is no danger of its members as a class repudiating the honorable traditions from the past, but there is no need, on the other hand, that they should acquiesce in the unjust assumptions of pseudo-philanthropic posers, to lay down their rules of conduct and morals for them. That London jury was very probably made of men who would, in their way of business, do far worse than the doctors whom, in their vicarious conscientiousness, they condemned, without scruple or remorse. As physicians, we wish to exercise charity for all, even the offensively self-righteous, but the common cheap virtue of this kind in the daily press sometimes makes us tired.

Criminal Abortion.

This great evil is not confined to this country alone. The Therapist has the following account of certain doings in the old-country:

That justice marches with a slow foot is nowhere more apparent than in the history of criminal abortion in the United Kingdom. During recent years the offence has been visited by heavy sentences upon medical men, midwives, and others; but, nevertheless, many advertising abortionists have been allowed to flaunt their nefarious calling far and wide under the thinnest of guises, and many newspapers have openly and habitually inserted advertisements of the kind. Of all the harpy ventures that have battened on this base pursuit, perhaps one of the most notorious has been that originated by a certain Madame Frain, but carried on of late years by a company. For at least ten years past, to our certain knowledge, this rascally concern has been distributing its circulars broadcast, in defiance of all rules of decency, and with a cynical contempt of the legal possibilities of the

situation. At length, however, the police interfered, and undertook proceedings that, as most of our readers probably know, have put an end, once and for all, to this particular scandal. Five persons who have formed the company were charged at the last Session of the Central Criminal Court with having conspired together, by means of advertisements in certain journals, to induce women to commit an unlawful offence. The charge, therefore, to all intents and purposes one of abortion-mongering, and it is reassuring to decent folk to note that it has resulted in twelve months' imprisonment for one of the prisoners, and nine months each for two others, while the remaining two were bound over to appear for sentence if called upon at any subsequent period. In this way the police have at length broken up a gang that for ten or a dozen years has been a standing disgrace to society. One gratifying point in this trial is the fact that the law is at length going to the root of the matter, and is meditating a crusade against the journals that have not hesitated to sell the integrity of their columns for a mess of pottage. In delivering judgment upon the Frain case, the judge made the weighty statement that, in future, newspapers accepting advertisements of the kind issued by the prisoners would be held equally liable with the principals. After that warning the rapid decline of the public abortionist may be confidently anticipated, for advertising is just as necessary to his existence as receiving to the thief. After all said and done, however, the Frain gang were abortionists only by legal construction. By artful wording of their advertisements they conveyed the idea to unthinking women that abortion would result from the use of their medications, which they had the effrontery to swear in court would not produce abortion. The drugs vended by the prisoners were of the usual cheap and common kind, such as iron, bitter aloes, and colocynth. It is needless to say that these worthless compounds were sold to purchasers at an enormously high rate. Indeed, the lucrative nature of the trade may be gathered from the evidence, which showed that for years past from £1,000 to £2,500 was spent annually by one advertisement agent alone. What is one to think of the vaunted progress of education and intelligence in the face of such facts? What is one to think of the morality of so-called religious journals that insert abortionist advertisements freely? The only glimmering ray of hope to be discerned is that afforded by the police prosecution, which, though tardy, has been effectual. If found necessary, it is to be

hoped that the legislature will step in and complete the eradication of this foul social ulcer.

Disharmony.

According to the Medical Fortnightly, disharmony is a lesion of organization; a degeneracy of evolution. In mental medicine the disharmonies form the transition between the normal and pathological conditions. In it is the middle ground where equilibrium is easily disturbed. The vice of medical organization is disharmony, a lack of poise and fancies and inclinations of the profession. The medical profession as a profession is constitutionally a discordant whole. It has never been in tune, because a proper key or pitch has never been given. As a profession it is a complex, heterogeneous whole, made up of disproportioned elements, contradictory tendencies and every defective timber.

The profession possesses of an intellectuality that is of the highest order, its mental faculties reach higher, deeper, broader than that of any profession, but it lacks in cohesive qualities. Its peculiarly brilliant mental endowments rather overbalances its practical considerations. Its individual members being human are given to singularities of make-up. They become successful practitioners—they owe their success to purely the original powers and limitations given them at birth. Their success is a personal success, naturally they become believers in self, ultimately, not being buffeted in life's course by the friendly but polished processes which characterize a lawyer's life, the physician finally is apt to blossom into an egotist. As such he may become a good or bad physician, just in proportion to his isolated anomalies of conduct and character.

If he is altruistic he will naturally lean toward serving others, and no doubt become an honored citizen, a successful practitioner; but if he is an egotist he will be overmastered by his egotism and his intellectual direction while being toward scientific attainments, may yet be so decidedly impervious and eccentric as to exclude the practical and useful, and make him ridiculous in his conduct, and even in his investigations. Such an individual is either a crank or a pure theorist and dreamer, whose practical work amounts to nothing.

By reason of the isolated life of the physician it is possible for such men to live and practice in a community and only be regarded as cranks. From such a class of introspectionists and egotists are recruited the individuals who create and maintain

disharmony in the profession. These introspective individuals are the men who are sensitive to criticism, quick to believe an injustice has been done them, and pose as the victims of professional jealousies. A grievance, ever so small, grows; the proverbial mole hill becomes a pathological mountain of spite and ill-will.

In every community it is possible that more or less of this abnormal condition exist between men; such disharmony is really pathological, for rivalry, competition should not engender such freaks of conduct. The impervious haughty and exacting physician is a mental freak; he cannot command the confidence of his fellows, and because he cannot rule in a medical society he tries to ruin, and exasperated by his poor success, beset by jealousies and tormented by being ignored, he becomes a curbstone falsifier, and belittles to every one who will listen, medical organizations and medical men who believe in organizations. Oftentimes such a man passes from comments to complaints, complaints to threats, and from threats to crime, and the community hears "about another doctor's quarrel ends in a crime."

It is too bad that men trained to be considerate of the frailties of humanity must expose their own psychic disorganization; their lack of proportion, and expose their wrongs, imagine or real, to the public gaze. Such men are by temperament and instinctive tendency degenerate, and belongs to the class of mental defectives which the French call phrenasthenics. They cannot control themselves, they are out of harmony and naturally cannot, nor will not, tolerate criticism, suggestion or interference. They have profound convictions, exalted opinions of self, and sometimes delusive suspicions which makes fanatics of them. We need a reform in medical training, students need some instructions in moral science, the data of ethics and pure psychology. Lawyers imbibe this in their training; ministers have it as a part of their profession, but the physician knows little of the principals of psychology underlying his own association with his fellows and his towns-people.

The modern tendency is to take the physician off of his pedestal of egotism, take off his silk hat and long beard, put him in tan shoes and a sack coat, give him the appearance of other men and make him do as other men, and learn by hard knocks that he is simply clay; sometimes poor dirt at that, and if he wants to be of use he must mix with his fellows, tolerate a broad altruism and be a civilized man.

Advice for Specialists.

The Medical Sentinel gives some practical advice for the specialist as follows:

THE GENERAL PRACTITIONER.

The all-round general practitioner has been on deck for a good many days and he is here to stay. He is the most useful man (or woman) in the profession and in the community; his work, unless it be that of the neurologist, is more difficult and trying than that of any specialist. He gets closer to the people and his hand comes nearer being upon the public pulse than that of any one else, and a larger and more sympathetic cortege will follow him to his last resting place, than ever moves in the funeral train of him who has been ever the most successful medical specialist in the world.

THE SPECIALIST.

The specialist is in the land, too, and he covers a good many departments these days. With the constant growth of the science of medicine he is needed, if, for no other reason than to work out the unfinished problems, infinite in number, in his own department, that he may from thence formulate theories and methods for the general practitioner who has no time for such work. That his work is needed and appreciated is also manifested by the demands made upon him by the general profession which is glad to secure his advice in many instance and often to turn over to him its most serious cases.

THE GENERAL PRACTITIONER SPECIALIZING.

There is a class of medical men who will confine a woman, amputate a limb, curette a uterus, enucleate an eye, cut a stricture or treat a case of typhoid fever—general practitioners, yet the greater portion of whose real practice is so much along one line that they may be said to be specializing general practitioners, having a "leaning toward" a certain line which they are much superior to the ordinary practitioner. They either have not the opportunity or desire, or hesitate to attempt the practice of a pure specialty. This class is largely found in the country towns where the field prohibits the practice of a specialty and sometimes it includes in the city the physician who is traveling away from a general practice. We fear that once in a while a man is attempting to be a general practitioner at home and a specialist with his friends in the country.

THE ALL-AROUND SPECIALIST.

There is another man who is not very numerous in evidence, although we all

meet him once in a while, who claim to be a specialist in many departments. Whatever disease may present to him, he feels that it falls within one of his specialties, and he has no hesitation in expressing such belief. He is often a well-educated medical man, and sometimes possesses more education than morals. In vaunting himself he takes an undue advantage over his fellow general practitioner with whom he competes in every line of work. The oculist who claims to be a specialist in gynecology, or the surgeon-specialist who confidently and confidentially announces himself a special authority in neurology, is a specialist in nothing except audacity, and his authority may be doubted in everything. In these days to be a specialist in one line is all that the human brain is competent to prepare for, although the all-around good general practitioner, and the specialist in his own lines, grows better and better as the days go by.

BECOMING A SPECIALIST.

The subject of becoming a specialist is one of much interest to a large number of worthy practitioners who are seeking to be relieved of some of the burdens of ordinary practice, and who hope to increase the revenues from their daily work. To any such of our readers we would say that specialism in medicine is growing and it is a worthy aspiration to desire to enter the field.

Be sure that your proposed departure is along the line of your best work and the time for its outset should mark the completion of many years of diligent toil preparatory thereto while yet in general practice. In the selection of a special field it should not be your aim to find the "point of least resistance," either locally or professionally, but you should go in the direction of your greatest strength, for in the end it will be a matter of merit which will determine the degree of success or failure which will follow you.

Do not wait too long. While you are moving in the old rut new men will enter your growing community, or those already there will enter the field before you and take away some of the prestige which your successful general medical career would otherwise afford you.

BE A SPECIALIST.

You cannot be a general practitioner and a specialist too, although you may be a general practitioner and at the same time superlatively good in some particular line; nearly every general doctor has one department in which he knows himself and is known to excel. Therefore, when you set out for the special field, be willing to leave your

patients behind, but be sure to take your patience with you. It requires more composure than most doctors possess to witness, complacently, one good general practice patient after another leaving him, and no "specialist" patient return. Here and there men well qualified for special practice, and who would eventually have won fame and a competency for themselves in special work, after a few months' trial, have turned backed into the general field because their professional lives during this stage of transition were so much more quiet than their former successful general days had been. They returned to general practice before they knew it; a little quiet case here and there and the urgent calls of old friends soon lead on to the old grind again, and before medical neighbors have had time to believe that a proposing specialist had ceased to be their personal competitor and had begun to send their patients to the new specialist, he was again in general practice.

Many a man thinks he has tried to build up a specialty and failed, and has few words of commendation for true specialism or those who are strictly specialists, who has never cut off from general practice for a moment. Such experience amounts to nothing

SPECIALIST OR GENERAL PRACTITIONER.

Upon this subject, therefore, the Medical Sentinel would advise you to consider all the phases thoroughly when planning a change in your practice and if you decide upon a specialty cut everything else off to the very limit, which will ensue you in time, in the narrow field which you may select, the respect and good will of your fellow practitioners and the emolument of a practice at least equal to the general work which you have left.

If this does not suit you, follow a general practice, allowing your mind to pursue most closely that department which possesses for you the greatest attractiveness, being a general practitioner who is specializing.

If neither of these suits you, continue in the good old field of general medicine, and receive along with its hard work; its honors. Cover every department as well as you can, but assume special knowledge no where, in which latter event, you will have the respect of your confreres and the gratitude and love of your community.

Treatment of Infantile Eclampsia.

According to The Medical Summary great skill is not needed to treat convulsions of children. To know how and to be pre-

pared is all the requirement. The state of unreadiness in which some find themselves is culpable. A comprehensive equipment for emergencies and a state of masterly inactivity when not actively engaged are virtues peculiarly fitted to success.

In the household where eclampsia exists, consternation and confusion prevails. A wise mother or a cool-headed neighbor may sufficiently grasp the situation to be of use. But, commonly, the physician is depended upon to bring order out of confusion and still the troubled waters by an air of self-confidence and cool deliberation. To do this he must know that he is equipped for the emergency. He has a bottle of chloroform, for a whiff of that is oftentimes enough for the paroxysm. How quickly it acts and how relieved are the anxieties of the household. No better proof of its usefulness and adaptability is needed, though it has the indorsement of the profession.

If the thoughtful have prepared a bath, a plunge into that soothes like an opiate. Supplement either by warm or hot pack; this is popular and possesses obvious advantages—less water required and valuable time saved. Besides, it is more convenient and may be prolonged or repeated without delay.

The gastro-intestinal tract is always unhealthy, and it therefore needs irrigation. Cathartics may not be admissible, but clysters are. A good one, consisting of soap-suds and asafetida, cannot be excelled for efficiency. The bowels are unloaded and tranquillity results. Nothing accomplishes like a copious searching irrigation—all nature feels its beneficent influence.

Some administer clysters of chloral the first thing. This is not the best practice. If the case be so urgent as to demand immediate relief of the paroxysm, employ chloroform. Chloral may be suitable after evacuation. For sleep or threatened recurrence nothing better offers than the hydrate. For the subsequent treatment bromide of sodium or passiflora fits in nicely. The two may be combined in a tolerable palatable solution.

In the majority of cases passiflora fulfills every indication satisfactorily. It is a most valuable remedy and should be more largely employed in just such cases as these. Some of the worst cases we have had have been easily kept under control by its judicious administration.

But it is not the intention to make this a treatise on the treatment of eclampsia of children. The principal object is to call attention to the responsibility of the physician to be fully ready for just such work;

to do which, and be in a state of preparedness, he must keep at hand for instant use an outfit consisting of chloroform, ether, chloral hydrate, passiflora, a good rectal syringe and thermometer.

The Sugar Evil.

According to Health Culture the use of sweets is one of the most prevalent and most pernicious customs of the day. The habit of using sweets is usually contracted in early life. The child before it can walk is frequently a victim of the candy habit; and this love of sweets often lasts through life. Although it contains food elements, ordinary cane sugar is not actually a food; but for all practical purposes may be regarded as a condiment. It is injurious in many ways. In the first place it acts to retard digestion through neutralizing the action of certain of the digestive fluids. A cereal taken unsweetened is converted by the ptyalin of the saliva into a digestible product, dextrine. But when sugar is taken with the cereal the ptyalin cannot act upon the starch, which enters the stomach unchanged. So a cereal with cream, or fruit juice, unsweetened, is readily digested, where the same with sugar, at once ferments in the stomach. The same is true of fruit, which should never be eaten with sugar. Strawberries, for instance, which by themselves are an ideal article of diet, become an indigestible mess when mixed with cream and sugar.

Another injurious result from the use of sugar is that through its appeal to the palate it induces overeating. Surely, after oysters, soup, fish, roast, game, salad, with several vegetables, the appetite is glutted, and the digestive system sufficiently taxed. But just at this point the ice cream, the pudding, the candied fruits and confections are brought on. The appeal to the palate is irresistible. The foolish diner, tempted by the flavors, takes into his already overloaded system a quantity of sweet matter which, once in the stomach, promptly ferments. The fermentation produces poisons which, in addition to those resulting from the chemical combination of the matters already taken, must be promptly eliminated by the depurating organs, skin, lungs, bowels and kidneys. Unless carried off by the depurating organs these poisonous matters are retained in the system, setting up disease in many forms.

Ordinary cane sugar should be considered not as a food, but as a condiment. The less of it used the better, especially by children, in whom the abnormal taste, once acquired, is often gratified to such an ex-

tent as to ruin the health and shorten the life.

The Value of Medical Societies.

The annual meetings of most of our State medical societies are held during the months of April, May and June. From those already held we hear generally favorable reports of largely increased membership and fully attended and enthusiastic meetings, says the Medical Standard. Some of them seem to be entering upon periods of remarkable growth and successfully organized work, but it is unfortunate that as a rule they are so feebly supported by the great body of the profession. It is true that in few States does the membership of its State society exceed ten per cent. of the total number of physicians residing within its boundaries. For instance in the State of Illinois, there are said to be more than 7,000 physicians, most of them regular practitioners and yet after several years of earnest work by an able corps of officers, the membership of the State society has been raised to the comparatively insignificant total of only about 700. When we consider that there are between 3,000 and 4,000 men practicing medicine in the city of Chicago alone and that of these about 900 are connected in a teaching capacity with the various Chicago medical schools the meagerness of this proportion becomes very apparent. This is practically the condition in every State in the Union.

Medical societies are primarily scientific organizations whose chief aim is the collection, discussion and dissemination of scientific knowledge. As important an element as the publication and circulation of medical books and journals has become—and every one must acknowledge that no more powerful factor has been introduced for the increase of medical knowledge than this—the opportunity of actual contact with other minds, actual discussion and exchange of ideas has a wonderful effect in sharpening the activity of perception. And the social opportunities at these gatherings bring men into touch with each other, enlarge their acquaintance and build up a fraternal feeling that contributes very much to the morale of the profession.

But one of the greatest opportunities of a medical society—and a neglected one—is in its power of organization to secure needed legislation. No body of men needs this more, although as a class they are largely adverse to mixing much in political affairs and prefer to devote time and efforts to science. Medicine is rapidly becoming a public function. The quarantine, public

sanitation and hygiene, the conservation of public health, the prevention of transmissible disease, the foundation and care of charitable and reformatory institutions, criminology, sociology and many other admittedly public questions are best understood by physicians. It is right that they should be administered by physicians, not by politicians, under the supervision of properly constituted scientific bodies. All these things require organized effort.

It seems, too, that physicians must fight for the perpetuity of the work they have accomplished. A variety of curiously constituted "systems of healing" have come into existence in the last decade. These are attempting to belittle and undermine the work of scientific medicine. These men have organizations and are often able to reach the legislative ear, although as a rule they represent the unlettered or irrational elements of society. Regular medicine is strangely indifferent to this tendency. The Standard recommends no severity in methods that will invite "martyrdom" but it demands the legislative recognition of scientific medicine as a right. Properly organized we might have a most powerful political machine and one of the right kind to work out the highest interests of society as well as to foster professional progress. Physicians should come into the medical societies!

Some Sources of Infection.

Bacteriological researches have shown that old paper money is usually tenanted by legions of bacteria, many of them belonging to pathogenic varieties, says the International Journal of Surgery. It would be rather easy to jest upon the matter, were it not one of very decided importance. In this country the currency bills pass from hand to hand until they become the torn and filthy rags that are finally sent back to the treasury for redemption. The worst feature of our paper currency lies in the fact that it is so convenient, for a number of reasons, that the people would rebel at the idea of being deprived of such an easy way to carry money. In England every bill that comes back into the possession of the Bank of England is immediately destroyed, and another is issued in its place. As the bank-notes are of larger denominations than ours, they are better taken care of, and a soiled note is an exception. It would really seem as if some such manner of destroying old notes ought to be adopted here, and it would seem feasible to compel all banks to disinfect the paper money they receive before paying it out again.

Another most dangerous feature of our mode of life consists in the open closets found in the toilets of all our railroad cars. The amount of dejecta, possibly containing typhoid or other noxious organisms, that is spread along our railroad tracks, to be washed off by the next rains into neighboring streams and rivers, must be enormous, and constitute no trifling danger to the health of our population.

We may well be thankful that the attention of the public has, of late years, been called to the evils of the spitting habit, and that it is beginning to realize, though slowly, the fact that it is not only nasty, but also dangerous.

Compensation.

The Cincinnati Lancet-Clinic says that all physicians are directly interested in their professional fees, and most of them consider the subject from varying standpoints. A few start in life with exalted and sometimes exaggerated ideas of their own importance, while others are inclined to be over-modest and humble in a conception of their professional dues. Between these extremes there are all degrees of financial perceptions.

Some communities are blessed with one or two great, strong men who intuitively reason out a theory of their own usefulness to the people among whom they live, and base their fees accordingly. Such men are as the very salt of the earth to their professional brethren. Upon their charges hinge the charges of a score or hundred other practitioners. Always the soul of honor and uprightness, their integrity is never questioned. They are never accused of surreptitious innovations in other fields than their own, but strictly attend to their own affairs, discriminatingly letting others alone.

A doctor living in a country town once said to the writer that the physicians of his country could well afford to support Dr. G., naming a professional neighbor. Asking why, "well," he said, "personally, I do not like him one bit, and don't have much to do with him; but could well afford to contribute to his support because he always charges good fair fees, and stands for his rights every time. That makes collections comparatively easy for the rest, and wherever there is difficulty he is selected as the arbitrator." And again said, "I don't like old G., but he is the soul of honor. That man old G., in his life was a continuous benediction over a whole country." Fortunately, there are others of his kind scattered here and there over the land.

Most physicians have a pretty fair appreciation of the ordinary value of their own services, and the man who rates himself as worth twenty-five to fifty cents per call is usually not far wrong in his conception. The same may be said of the man who makes a one-dollar rate, and the rule continues to apply to the two and three-dollar man.

In cities it is not possible to make fixed-charge men. There are those who seek service and small prices. As one once said, "I sought a business among the poor classes who could not pay much." He recognized the fact that he himself came from their ranks, was one of them, knew that he was uncultured, and had a limited education, which made him unfit to enter milady's chamber. Then, in contrast, there is the man who would be out of place in the cottage or tenement of the laboring man, but with refinement and education just naturally seeks association among those of his kind. Each has his place, and together they touch elbows in the ranks of the now great medical army.

Fixed, inexorable laws as to professional charges for services cannot be enforced. This, however, does not prevent a creation of fee bills, which act as guides of reference and should be constructed somewhat according to the average ability of the people in any community to pay, with perhaps a maximum and minimum rate. The practice of medicine is not a trade where the price of day's time can be fixed with uniformity; nor is it a commercial pursuit where a given commodity can be measured or weighed out at a fixed price and sold alike to rich and poor for the same sum; and yet a service of the very highest order is demanded of those who constitute the medical profession, for many times to the parties concerned it means a life or limb at stake, and all that a man hath will he give for his life. With such conditions confronting it is the rarest thing in the world for a physician to take an undue financial advantage of a patient. On the contrary, it is not one of the rarest things in the world for malpractice suits to be brought against physicians, and that when there is neither cause or justification.

Yellow Fever in Mexico and in Central and South America.

According to the Medical Record, an exhaustive account was published in "Public Health Reports," June 15th, of the sanitary condition of Central American and Colombian towns with special reference to their geographical position and the possible

routes by which yellow fever is conveyed from one to another, and the dangerous lines of communication with the United States. The fact is pointed out that the history of yellow fever can be traced back to many years before the invasion by Cortez, and that since the first settlement by the Spanish the fever situation has apparently undergone no improvement. Vera Cruz—which has been since its foundation a hot-bed of the disease, and which last year had a mortality rate of six hundred and seventy out of a population of thirty thousand—is undoubtedly the Mexican port most to be dreaded by the United States as a source of infection. Fortunately the quarantine regulations are strict, and all freight and passenger traffic, with the exception of a few steamers which trade between Vera Cruz and Pascagoula, Miss., and New Orleans, has been deflected to the northern Ports. The bulk of the passenger traffic goes to or through Havana, and, as the writer of the report remarks, the danger of infection of Havana from this source is a problem that can be solved by an absolute quarantine or the hearty co-operation of the Mexican health authorities. The railroads are a source of dangerous communication, and it is only by constant vigilance on the part of the Marine-Hospital service inspectors on the border that yellow fever is kept out of the United States so successfully as is at present the case.

“Public Health Reports” reviews at length the situation in the Central and South American towns, which by reason of their location and on account of the intercourse between them and this country are ever a probable means of disseminating yellow fever through parts of the North American continent. The author of the report says that the prevalence of Chagres and yellow fever on the isthmus of Panama during the construction of the canal by the French should be borne in mind, should the United States Government undertake to build this canal. There is an infected territory from ocean to ocean, and the importation of a number of non-immune workmen would be the signal for an outbreak of an epidemic of yellow fever. The yellow fever infection is there, and the Chagres will come when the excavations commence. The whole isthmus should be disinfected before any workmen are imported, and a thoroughly equipped, strictly enforced maritime quarantine maintained at Panama and Colon. This should be done not only for the protection of the army of workmen that will be necessary for such an undertaking, but for the protection of the infectable States that will be in direct communication

with the isthmus just as soon as timber and supplies are needed for the construction of the canal. The route of the Nicaraguan Canal is not infected with yellow fever, and there is no history of any infection having been in the country for many years. There should be suitable quarantine stations maintained at each end of the canal, and they should be the first things constructed. It matters not which route is selected, there will be a rush of people from all over Central and South America coming from infected localities and bringing the infection with them.

Yellow fever is now extremely prevalent in Vera Cruz and along the southern coast line of Mexico and the Central American States. It is, therefore, fitting that attention should be called to the unsanitary conditions of these towns, and to the importance to the people of this country that that measures should be taken to render them healthy, especially with a canal at Panama or Nicaragua in view. No serious attempt has ever been made to extirpate or check yellow fever in any of the South American republics. The towns along the coast and the ports are, as a rule, the most unhealthy localities, and the physicians furnished by the government are, owing to these insalubrious conditions and too poor pay, by no means of a high class. Taking then into consideration the constant menace the existing state of affairs in the South American republics is to the health of the inhabitants of the United States, it is somewhat a matter for wonder that the government does not exert its persuasive powers or even exert some pressure to induce the republican governments to initiate a policy of sanitary reform.

What Are “Liberal Physicians?”

A letter from the “National Association of Liberal Physicians, Surgeons and Dentists” is before us, says the Interstate Medical Journal. The letter tells us that the association is organized for the purpose of protecting *competent* licensed and unlicensed practitioners against the inroads of the “great medical trust.” Reading along a little further we find that the great medical trust referred to means the legitimate practitioners who secure the enactment of good medical laws, the institution of State Boards of Health, and, in short, all those whose desire it is to raise the standard of medical education and practice. The “National Association of Liberal Physicians, Surgeons and Dentists” is nothing more nor less than a palpable fraud, an illegitimate offspring of medicine, a scheme

of charlatanism to secure protection against the severe hand of the law. Its principles are: "Let anybody practice medicine if they want to; let the osteopath, the magnetic healer, the Christian scientist go on their (un-) peaceful way, killing as they go; in short, do everybody or they'll do you." This roughly comprises the general aims of the "association." One would suppose that these ardent fakirs would not have the effrontery to put their views into black and white and have the audacity to send them to reputable medicine men whose views they plainly know; but when one thinks of the fact that they stoop to anything and stop at nothing, then this latest action is not surprising. The letter shows us that the osteopaths and their brothers-in-arms, the magnetic healers, etc., are about to form an amalgamation to fight law and order as personified in the laws for practice in the different commonwealths of the Union. It is another warning-note sounded for the benefit of the regular profession, telling them to get together, to arm themselves to the teeth and to exterminate these vermin from the face of the earth. Under these circumstances one wishes that the Federal Court could have the power to issue an injunction of restraint against those vendals who thus publicly dare parade their principles in the shape of this letter, which shows us unmistakably that its promoters are against all law and order.

Contraindications of Strychnine.

Now and then one sees in the literature (though less frequently than formerly) that strychnine is indicated in paralysis. According to Medicine, such a statement is about as valuable as to say that a certain remedy is good in heart disease, or dropsy, without further specification as to the indications to be met by the particular remedy. Strychnine is a powerful remedy when given in full physiological doses of one-twentieth to one-twelfth of a grain three or four times a day. In certain forms of paralysis it is useful, but its value is largely confined to those due to involvement of the peripheral nerves, or in which the weakness is due to one of the varieties of progressive muscular atrophy. In paralysis of central origin it is of doubtful efficacy, if it does not do harm in many cases. We think that the untoward effects of strychnine in central lesions would have been much oftener described in the books if it had not been for the fact that the strychnine was given in too small doses. Tonic doses of strychnine, those ranging from 1-64 to 1-32 of a grain, are quite devoid of effect upon

the vascular and nervous apparatus, and the drug when administered in such dose has very little effect, either for good or for evil.

If given in large doses after hemiplegia, there is certainly danger of the increased blood-pressure leading to a second rupture of the weakened arteries, providing the case is one of cerebral hemorrhage. If, however, it is due to thrombosis, there would probably not be the same danger, but the primary conditions underlying both thrombosis and hemorrhage are so nearly alike that it is easily possible that in certain patients who have had thrombosis it may result in hemorrhage. Strychnine in full physiological doses is usually contraindicated in all forms of hemiplegia. Most writers are agreed that it is contraindicated in tabes, and the literature contains numerous references to patients who have been made distinctly worse by large doses.

Shall Alcohol be Recognized as a Food.

According to the Journal of the American Medical Association, the experiments of Prof. W. O. Atwater, of Wesleyan University, Conn., and the discussions growing out of them have opened up afresh the old questions: "What is Food?" and "Is Alcohol Food?" The experiments in question consisted in observations on the metabolism of a man who was confined in a respiration-calorimeter during successive periods. The calorimeter used by Professor Atwater is one of the most complete in existence, and the technique of his experiments is elaborate and as free from error as it is possible by present facilities to make such extensive analyses. The observations include not only a quantitative analysis of the various foods and beverages consumed by the man during the period of confinement, and the various excreta, but also a careful estimate of the energy represented by ingested material as well as the energy liberated from the body in the various excreta, in heat and in mechanical energy.

Through the means of the respiration-calorimeter an experimenter is able to verify the law of the conservation of energy as applied to the animal organism. Professor Atwater has brought new and conclusive evidence to prove that every unit of energy which enters the body as potential energy of the food will leave the body in potential energy as excreta, in heat radiated from the body, or in mechanical work done by the muscular system. The material income of the body must balance the material out-go, and the energy-income of the body, in accordance with the law of conservation of

energy, must balance the energy out-go, however many transformations it may undergo within the body.

Professor Atwater substituted for a portion of the non-nitrogenous foods a quantity of ethyl alcohol equivalent in energy to the food which it replaced— $2\frac{1}{2}$ oz. of absolute alcohol per day in six doses. In harmony with what has been known for many years, he found that alcohol is nearly all oxidized within the body. A necessary result of its oxidation is a liberation of its energy, which is added to the total energy of the body. In these respects alcohol is similar to foods because all foods are oxidized within the body, giving up their energy to it. His conclusions that the body held its own as well when alcohol was made a part of the diet as it did with a normal diet is discussed in detail and with evident fairness in another column of this issue, by Professors Woodbury and Egbert, of Philadelphia.

The question at issue is whether its oxidation in the body entitles alcohol to a position among the foods. If all substances which are oxidized in the body and give up their energy are to be classified as foods we shall be obliged to list with the latter many substances which are more or less noxious in their influence on the system. The fallacy of the reasoning which would place alcohol among the foods is very apparent when we put it in the form of a syllogism: All foods are oxidized in the body; alcohol is oxidized in the body; therefore, alcohol is a food. As logically might we say: All birds are bilaterally symmetrical; the earthworm is bilaterally symmetrical; therefore, the earthworm is a bird. Oxidization within the body is only one of several important properties of a food; as bilateral symmetry is only one of several important characters of a bird.

If we possessed a generally-accepted definition of a food, it could be very quickly decided whether or not alcohol conforms to the several conditions which foods must fulfil. There are almost as many definitions of food in our language as there are writers on nutrition. No definition yet proposed is generally acceptable. The difficulty which physiologists experience in formulating a definition of foods is similar to that which biologists have experienced in formulating a definition of life. The advance which physiologists, biologists, pathologists and neurologists have made in the study of the inner life of the cell—that ultimate structural unit, and life-unit—ought to give us in our attempt to define a food advantages incomparably greater than those which Liebig enjoyed half a century ago.

The alcohol-a-food fallacy emanated, along with other notable fallacies, from the chemist, Liebig. From his rather restricted point of view he propagated three doctrines which have been very difficult to dislodge. These were: 1, that the nitrogen of the urine is a measure of muscular work; 2, that meat extract—Liebig's Fleisch Extrakt—contains nourishment for the living tissues of the body; 3, that alcohol is oxidized in the body and must, therefore, be a food. Fick and Wislicenus proved the error of the first doctrine, Voit and others the untruth of the second, while numerous physiologists, notably Fick and Bunge, and many members of the medical profession have exposed the fallacy of the third. But like Banquo's ghost, "it will not down." Great commercial and social interests are involved in this particular fallacy, therefore the tenacity with which it clings to existence.

A definition of food must include a statement of its general effect on the inner life of the individual cell. In this regard alcohol stands far removed from all recognized foods. Advocates of the alcohol-a-food dogma try to evade the main issue by contending that "as alcohol is oxidized in the body it is to a certain extent a food" or that it possesses "a limited food-value." This method of reasoning is just as fallacious as it would be to contend that because an earthworm possesses one of the requisite characters of a bird it is therefore to a certain extent a bird. The claim that alcohol is a food, in any proper sense of the term, is not in our opinion sufficiently proved.

Prophylaxis of Children's Diseases.

The Medical News says, that we are getting ever farther and farther away from the idea, once so prevalent, that the so-called "ordinary diseases of childhood" are practically inevitable. While the most careful precautions are necessary to prevent the spread of measles, scarlet fever, and whooping-cough, the problem of the prophylaxis is by no means hopeless of solution. School inspection has in recent years made it clear that the prevention of the spread of infectious disease among the children of a neighborhood is only a matter of exact segregation. It remains now for the family to demonstrate that even when a contagious disease has entered a household, it is by no means a foregone conclusion that all of the susceptible members will be attacked. This is already a happily accomplished fact in the practice of many physicians.

It has been often said that scarlet fever is intensely contagious. It is true that the

germs of the disease retain their virulence for a long time and outlive seemingly unfavorable conditions, such as long transportation in letters. The disease does not spread, however, except by direct contact with material from a scarlet-fever patient. As for whooping-cough, attention has been called in France to the fact that the mere separation of the corridor of a hospital of those suffering from the disease, and the prohibition of the passage of attendants from an infected to an uninfected ward are sufficient to prevent the spread of the disease. In measles segregation precautions to be effective must begin early and must be very carefully enforced. Even against its eminent contagiousness, however, a barrier can be placed much more effectively than formerly because of the help that Koplik's spots afford in the early diagnosis of the disease.

All the diseases of children are worthy of respect in this matter of prophylaxis. Even mumps and chicken-pox may give rise to complications in the joints, kidneys or heart, that will seriously interfere with subsequent good health, and make the patient much less resistant to disease later in life.

Now that schools are becoming less a factor in the spread of contagion, the physician himself must take additional precautions that he, in the course of professional work, does not prove a source of contagion. The practice of wearing a long washable overgarment while attending cases of contagious disease is no longer merely an extraordinary precaution to be taken in better class families. It has become a plain duty for the physician in all cases. Children can, without doubt, be guarded effectively from all contagion until such time as their resistive vitality will protect them. Freedom from the contagious diseases of childhood will often mean perfect health for the individual up to adult life, while, as is well known, these diseases often leave their "marks" on developing adolescents. Damaged constitutions result that prove an easy prey to typhoid or pneumonia or insidious tuberculosis.

The More Frequent Causes of Chronic Disease.

The International Medical Magazine says that these are to be looked for especially in the digestive and the reproductive systems. Tuberculosis, which causes more deaths than any other chronic disease, might be considered an exception to this statement, and possibly it is, since bad inheritance and an unsanitary environment are known to be

powerfully conducive to this affection. But even tuberculosis would very generally be escaped by its victims, if their powers of resistance had not been additionally weakened through harmful eating and drinking or by offences against sexual hygiene. The manifold ways in which the health can be seriously impaired are familiar to most physicians, though such causes are too often overlooked. A case recently examined by the writer and found to have a markedly contracted liver as well as a chronic gastric catarrh, had been under treatment for more than a year by an able neurologist, without any examination of the abdominal organs, either externally or internally, though the patient confessed to intemperance in early life. He had gone through a prolonged rest cure and spent many months at a health resort, but his liver had never been percussed or his stomach contents tested. We need not stay now to enlarge further upon this side of the subject. Autointoxication is to-day probably the most prolific cause of chronic disease. But sexual excesses and irregularities, and the venereal affections which belong in the same category, constitute at least a close second. Delayed marriages, long courtships, masturbation among the unmarried and onanism among both the single and married are prolific but often unsuspected causes of chronic disease.

A large proportion of American women grow up in the belief that marriage is only desirable when the husband is sufficiently forehanded to support them in idleness, if not in luxury, and too many of them are unwilling to bear the burden of maternity even after they have married. Hence increasing celibacy and a large resultant increase of vice. Hence, also, the increasing number of childless marriages. The writer has seen three cases in as many months in which nervous systems had been damaged in consequence of a resort by married persons to the vice of Onan for the purpose of avoiding pregnancy. In one case the husband claimed to have been advised by an eminent physician, now deceased, to adopt this method. We cannot help thinking that no such dangerous advice was really intended to be given. In one of the other cases the wife had become a nervous wreck in consequence of this practice, which the husband had insisted upon and in which she had unwillingly acquiesced.

It is always unpleasant to feel obliged to catechise patients as to their daily eating and drinking, and still more so to inquire particularly into their sexual habits; yet with delicacy and tact such information can usually be obtained without offending, and

how necessary it is, the great frequency of nervous breakdowns from these causes makes abundantly manifest.

The Cause of Scurvy.

The oldest writers believed that scurvy was due to the excessive consumption of salted meats, says Medicine. A later view attributed the disease not so much to salted foods as to the absence of fresh vegetables, and particularly the absence of vegetable acids. A careful study of the whole question led to the addition of lime juice to the diet of soldiers and others who were deprived of fresh food. This was believed to be a prophylactic against scurvy, but its efficacy in this respect has been doubted of late years. The marked decrease in scurvy among soldiers is attributed to the shorter voyages, due to the use of steam, and to improved hygienic surroundings. Damp and close quarters have been thought by some to be the sole cause of the development of this affection.

Recently, F. G. Jackson and Vaughn Harley, in the *Lancet* of April 28, 1900, have made an experimental study of the whole subject. They give some exceedingly interesting data disposing of these theories. Numerous historical outbreaks of scurvy are carefully studied. Some expeditions suffered from violent outbreaks of the disease when an abundance of lime juice was taken daily; others again, who had no lime juice and were placed under the most appallingly unsanitary conditions and endured the greatest hardships, were entirely free from the affection. A study of these cases shows that those parties who were free from the scurvy were supplied with an abundance of fresh meat. In one party which spent nine months, including a winter, after the loss of their ship, upon Franz Josef Land there was no case of scurvy, though they had no lime juice and lived entirely upon fresh meat and frozen blood. Another instructive case was that of six priests who lived in a small hut in Northern Siberia, and who subsisted almost entirely upon salted fish, tea, and bread, their religion not allowing them to eat meats. A boy who was left with them lived largely upon bear meat. He was not affected with scurvy, while the six priests all died before the spring with this disease. From this and other facts it appears that neither lime juice nor fresh vegetables prevent scurvy; it is not the absence of these that is the cause of the disease, but it is a disease caused by the eating of tainted food.

The writers, accordingly, began an experimental study to test these conclusions.

For their purpose they chose monkeys, though just why this animal was taken it is difficult to say; it is stated by them that it was because of its resemblance to the human. Three groups of animals were experimented with. The first was fed upon a mixture of boiled rice with fifty grammes of meat taken from a freshly opened can of Australian preserved meat. In preparing the rice it was boiled with the meat, so that any meat juices might be absorbed by the rice. The second group was fed upon the same quantity of a similar mixture, but previous to the mixing of the meat with the rice the can was allowed to remain open for some days. In these cases the meat was not thought to be bad, but it was sour and had some odor. The third group was given exactly the same diet as group two, but in addition an apple or banana was given every day.

All three groups of monkeys soon succumbed to the diet. Those receiving the meat from the freshly opened can soon developed diarrhea and became rapidly emaciated, but there was no mucus or blood in the stools. In the second group diarrhea developed more quickly and emaciation was more rapid, blood and mucus were found in the stools, and at varying periods of from twenty-five to forty days the gums became spongy, ulcerating in the majority. In the third group the symptoms were precisely like those found in the second, but the ulcerations were less marked and the diarrhea and emaciation not so severe. This difference was thought to be due to the fact that the monkeys ate less of the mixture of rice and meat in consequence of their receiving fruit.

The blood examination of these monkeys showed the changes commonly found in scurvy, namely, a marked decrease in the hemoglobin, an increase in the leucocytes, but no diminution of the blood-corpuscles, with an increase in the fibrin, and there was a lessening of the time required for coagulation.

These experimental studies are of striking interest, serving as they do to confirm the fairly well based view that scurvy is due to ptomaine poisoning, and that these ptomaines are due to badly preserved food. If this theory is correct, not a little light is thrown upon the prevalence of scurvy in whaling ships, particularly those crossing the equator into the antarctic regions, where some of the most severe cases of the disease have been noted. Here the food supply of the ship had been exposed to the heat of the tropics, and imperfectly preserved as it was by the admixture of salt the fermentative processes took place, subsequently to

be suspended by the cold of the antarctic regions. The antiseptic action of the cold does not destroy the ptomaines which have already formed, and probably this is the chief danger in the use of preserved meats. The attacks of indigestion which followed the use of the so-called canned roast beef furnished the American soldiers during the war with Spain is amply confirmed by the experiments upon the monkeys. They all suffered from diarrhea, and so did the soldiers who ate the canned meat in Cuba. The experiments would have been more valuable if animals could have been obtained that were accustomed to the meat diet, and it is to be regretted that the writers did not conduct two series of parallel experiments, in which monkeys were supplied with the same quantity of fresh meat, cooked with rice in the same way. Had this been done, and these animals developed no untoward symptoms, the results would have gone far toward settling conclusively the view that scurvy is dependent upon tainted food and not upon the salted meats or unsanitary conditions, though these may contribute their share in the production of scurvy in depressing the vital powers. The experiments and the whole study are of rare interest, in view of the light which is thrown upon meat preservation and canning operations. Further studies should be made upon the canned meats to ascertain what these poisonous substances are, that they may be isolated and rules established that will be guides in the practical preservation of foods.

The Fallacies of X-Ray Diagnosis.

The New York Medical Journals says :

We have never sought to belittle the value of Rontgen-ray photography in diagnosis, but we have felt from the time when the announcement of Professor Rontgen's discovery was made that there was danger of its being overestimated. Such a startling and unprecedented novelty as a means of seeing into and through opaque objects could not fail to impress unduly those enthusiastic individuals—and they exist in our profession as well as among the rest of mankind, though not, is to be hoped, in quite the same proportion—who voice their unquestioning credulity by such a cry as, for example, "the machine can't lie," the "machine" being an ordinary photographic camera or the apparatus employed in making Rontgen pictures. But it has long been known that common photography is capable of distorting the truth to a grotesque degree, and it seems that the Rontgen-ray picture may do the same thing. This is

most cogently set forth in the report of a committee appointed by the American Surgical Association three years ago to report upon the medico-legal relations of the x-rays. The committee's report was presented at the association's recent meeting by its chairman, Dr. J. William White of Philadelphia, and is printed in the July number of the American Journal of the Medical Sciences.

Among the instances of erroneous x-ray observations reported to the committee or mentioned by it as recorded in recent literature we may cite the following: 1. Dr. B. Farquhar Curtis' case in which a headless pin was supposed to have lodged in the œsophagus, and a scratch on the glass under the gelatin caused what at first seemed to be the shadow of the pin. Fortunately, it was perceived that the outline was too irregular to be that of a pin, no operation was performed, and the pin was passed by the anus. 2. Dr. W. J. Dodd reports the case of a man who was shot in the upper part of the thigh. The scrotum was filled with blood, and a fluoroscope examination indicated what appeared to be a bullet imbedded in the testicle, but an operation showed that the testicle, though diseased, contained no bullet. 3. In a case mentioned by Dr. W. L. Estes some bits of clothing, coagulated blood, etc., made a shadow which was supposed to be that of a bullet. 4. Dr. Christian Fenger reports a case of two ineffectual operations for the removal of a needle the situation of which was apparently shown by the x-rays, but which could not be found. 5. Dr. J. E. Moore writes: "Yesterday an ineffective operation was performed at Asbury Hospital, of Minneapolis, by a very competent surgeon. The skiagraph showed an open safety pin in the trachea, just below the third ring. An opening and thorough search in both trachea and œsophagus failed to reach the pin." 6. Dr. John Owens reports that in a very troublesome case of fracture of the radius and ulna near the wrist, in which one of the bones was wired, the Rontgen picture seemed to show that the wire did not pass through the fragments. 7. Dr. F. S. Watson relates a case in which pictures taken at different times showed a needle in the foot in various situations. It was found at last, but not in the spot shown in any of the pictures. 8. In a case of Dr. DeForest Willard's Rontgen pictures taken at different angles indicated the situation of a bullet to be in the knee joint, at the inner condyle, but it was found firmly imbedded in the posterior surface of the tendon of the patella. 9. Dr. R. H. Reed (Journal of the American Medical Association, April 30, 1898) has reported a case of faulty lo-

calization of a swallowed pin leading to fruitless exploration of the stomach and œsophagus by gastrotomy and a subsequent decision to perform laryngotomy, which was prevented only by the patient's dying on the table from the rupture of an abscess into the trachea. The pin was found at the bifurcation.

The committee's data show clearly that our present ability to draw accurate conclusions from Röntgen-ray pictures is often very limited, especially in cases of fracture. There is great danger that misleading pictures, which may be made either erroneously or by design, may be admitted as evidence in malpractice cases; yet, how untrustworthy they are, when unsupported by other evidence, is shown by the facts that good clinical results in fracture cases, without impairment of function or palpable deformity, may be made to appear very bad ones in the pictures, and even that fractures may be shown that have no existence, while others known to exist in a recent stage are not shown. Clearly, no conclusion in fracture cases can be invariably based upon Röntgen-ray photography alone, and it is well that such an important body of surgeons as the American Surgical Association has so expressed itself by unanimously adopting the conclusions reached by its committee.

On Some Uses of Catgut.

The Medical Age says that all medical men are familiar with the genus cat, and a few have a passing acquaintance with the "kitty;" but the delicate and prudish maid who said the "pussy intestines" of her tennis racquet were relaxed had largely missed her guess. It is the gentle sheep which has from time immemorial yielded from his ruminant bowel those strands which have done so much for the development of musical, surgical, and piscatorial history. The sheep and his companion, the lusty billy-goat, furnish that marvelously fine translucent material for the stringing of the maestro's violin and the maiden's racquet, the ligation of arteries, and those fine "mist-colored" leaders which delight the gentle angler's heart. Not the fat Shropshire or Southdown whose "saddle" delights the gourmet's palate, but the lean and ill-fed sheep is said to yield the toughest gut. And the sheep that graze upon the Neapolitan hills, together with those gaunt lactiferous nanny-goats, the ambulating milk cans of Naples, furnish the strings of finest texture and greatest durability.

The Italian violin makers no doubt brought about the perfection which has been

attained in the preparation of this material; and bound to the frame of the old Cremona, the vibrations of these cords of gut, under the hand of the virtuoso, have thrilled the hearts of thousands. But did Remenyi on his old Stradivarius ever evoke a strain more thrilling and inspiring than the strain of a two-pound trout on the slender, almost invisible, leader? These strong, fibrous strands of humble origin have helped to fame all our illustrious Ole Bulls, have secured severed arteries and assured the glory of our Nicholas Senns, and to all our modern Izaak Waltons have brought untold success in the gentle art of angling.

Some few doctors there be who can please themselves and rejoice, perchance, their friends on the catgut stretched over a violin body, "scraping the hair of the horse over the gut of the cat;" we can all (some better than others) tie a ligature; but blessed, just now, are those favored medical men who can cast a bit of gut from the shady banks of some favorite pool or stream and lure to flies and hook the speckled beauties in the cool depths.

This is the time to exchange medical literature for the rich lore of angling. Van Dyke's "Fisherman's Luck," Kingsley's "Chalk Stream Studies," Walton's *Complete Angler*—these and the like are the works of reference that should now occupy the fagged doctor's attention. This is the instructive recreation that will fit him to cope with next autumn's cares and ills. Let him "hang up the fiddle and the bow," bury the sutures or store them in his favorite sterilizing solution, and fare forth with what should now be the leading gut, the gut leader.

Summer is here. Let us fish.

The Penalties of the Fourth of July.

The Boston Medical and Surgical Journal says that it was reported several days ago that one result of Philadelphia's Fourth of July was "Ten dead and three hundred in the hospitals." This reads like the war news with which the last year or two has again made us familiar, rather than as the record of a day of national rejoicing. We have no doubt that other cities have suffered in proportionate measure, and the query naturally arises whether we are to continue complacently to look on at this destruction of life and limb without an organized protest which will really prove efficacious. It may be our imagination or the fact that we have sought a place of retirement during the celebration of the holiday, but it seems as if the conventional noise were decreasing year by year. This, however, evidently does

Rockbridge, Va., Alum Water.

That are of Intrinsic Value to the Medical Profession.

Extract from a paper read before the Atlanta Society of Medicine, April 26, 1887, by JOHN S. TODD, M. D., Professor Materia Medica and Therapeutics, Atlanta Medical College, Ga.; Ex-President of Georgia Medical Association; not read in our interest, but in the interest of Science and his profession:

"Some four and a half years since I had, among other cases, one of dysentery, which resist ing all medication, became chronic, and a LARGE ULCER OF THE RECTUM DEVELOPED. I called in consultation a noted surgeon. The patient's condition was one of extreme emaciation; blood and mucus in large quantities were voided about an average of once an hour. The dose of opium had been increased to 3 dr. laudanum in twenty-four hours and $\frac{1}{2}$ gr. morphine twice a day, and still matters grew worse. We decided to inject solution 30 grs. to oz. nit. silver in rectum. The result was a COLLAPSE that nearly proved FATAL. Upon it being suggested later that the operation be repeated, the patient, a young man, said if we and his family insisted, to avoid it HE WOULD COMMIT SUICIDE. Dr. W. S. Armstrong was then called in with me. He suggested an exclusively milk diet, gradual reduction of opium, and ROCKBRIDGE (VA.) IRON AND ALUM WATER. Immediate improvement set in, and in TEN DAYS so great was THE CONSTIPATION that oil and enemata had to be resorted to to procure an evacuation from the bowels. Since that time I HAVE TREATED SEVERAL CASES EQUALLY AS BAD, WITH SAME HAPPY RESULT, using same diet and medicines, for of all agents for this disease, I consider THE ROCKBRIDGE ALUM AND IRON WATER THE FIRST. It is equally EFFICACIOUS in CHRONIC DIARRHŒA, AS MY RECORDS ATTEST."

DR. TODD, March 21, 1900, writes: I have for 16 years used these GRAND WATERS constantly in my practice with increased and increasing satisfaction, I inclose you article written 3 years ago on opium. "In chronic diarrhœa and dysentery, the milk diet, ROCKBRIDGE ALUM WATER, and small doses of opium given cautiously—very cautiously lest your patient acquire the opium habit—has proved so INVARIABLY SUCCESSFUL with me, that I have COME TO TREAT THESE CASES with a CONFIDENCE BORN OF SUCCESS."

DR. HUNTER MCGUIRE, Virginia's great surgeon, says: As an astringent and tonic it is one of the most valuable I have ever used.

DR. S. GAILLARD THOMAS, Professor College of Physicians and Surgeons, N. C.: Most efficient astringent and tonic waters I have ever employed.

Write JAMES A. FRAZIER, Mgr. Receiver, Rockbridge Alum Springs, for Pamphlet.

not mean that the element of danger is thereby removed. There is apparently a growing tendency, on the contrary, to use the more powerful explosives, as, for example, dynamite, in the construction of Fourth of July toys. The accident in Philadelphia which lead to the death of a number of children and the injuring of twenty or thirty more, was said to have been due to the explosion of dynamite, this dynamite being publicly exposed for sale on a crowded street. We learn also that the authorities at once arrested the vender of these wares, and were inclined to mete out summary punishment. But why not be beforehand in such matters and prevent the sale of such articles entirely, except by properly licensed persons? Clearly something radical needs to be done in spite of the fact that the glorious day comes but once a year. Thus far we have not heard much of tetanus; it is to be hoped that the precautions taken may have done a good work in averting this added menace to life.

The Gold Cure.

The Quarterly Journal of Inebriety says that the decline and disappearance of the "Gold Cure" asylums brings into greater prominence a class of incurables who are

more degenerate and important than ever. They come to asylums demanding positive medication and are dissatisfied, except when under the influence of some narcotic. At the Gold Cure asylums it was found by repeated experiment that alcohol was distasteful and nauseating. The same experiment is tried while under treatment at other places, and not finding this condition, they lose all confidence in the treatment. After a brief time they become clamorous to leave, claiming to be cured or doubting the value of this kind of treatment. Most of these are degenerates who should be in an insane asylum or locked up and forced to pursue some rational course of treatment. These are the men who go to every new asylum, and if freely treated with narcotics, are satisfied and are extravagant in their praises of the value of such treatment. They are neurotics of a very low type, who are always seeking medical relief for physical and mental conditions, and are willing to take anything that is offered from any source or in any way if it only brings relief.

Dr. A.: "Doctor what do you think of the prospective rupture with Turkey?"

Dr. B.: "I think it will become strangulated, and will require 'taxis.'"

The Anti-Spitting Law.

The Medical and Surgical Monitor says that Indianapolis is to be congratulated upon the passage of the anti-spitting bill. Several cities have made an effort in this direction, and only a few have been successful. It is a worthy measure when considered in the light of cleanliness, if nothing more. It has, however, a still more important significance. As a means of preventing the spread of contagion it is praiseworthy indeed. Every one should consider it an individual obligation to render all possible assistance in the fulfillment of its requirements. The ignorant and filthy may obey only when under the watchful eye of a police officer, but all good citizens will certainly interest themselves in eradicating this disease-breeding habit.

The ordinance provides a fine of \$2 for spitting on any sidewalk, steps or floor of street cars or of public buildings.

The Woman's Local Council prepared the bill and have been energetic and untiring in their efforts to guide it to a successful termination. The superintendent of police endorsed it, and has notified his officers to arrest all violators.

MISCELLANEOUS.

Paris as a School of Manners.

All sorts of people no doubt intend to go to the Paris Exhibition, and among them will certainly be a considerable assignment of those ill-regulated and dirty folk whom we may call "spitters." Let them, then, begin at once and put themselves in training, for spitting is to be prohibited in Paris! Still, notwithstanding what we hear about the determination of the Municipal Council in Paris to put a stop to spitting in the streets of that gay city, we greatly question whether the London County Council, or any of the minor bodies charged with upholding decency in our midst will follow suit. When electricity shall hold the field, and horse dung and other filth shall have ceased to give to London air that peculiar fragrance by which it is distinguished, then perhaps it will be possible to prohibit spitting in the streets, but at present a sense of humor and of due proportion in evil will probably hold us back from any extreme measures. In the meantime, we might, perhaps, go so far as is done in some American cities; that is, prohibit expectoration on the footpaths or, as they call them, the "sidewalks." This would be no hardship. We doubt,

however, whether even this minor step will be taken. A generation so callous and indifferent to decency that great public omnibus companies can allow their drivers to while away the time by repeated and apparently aimless spitting in free air to the annoyance of their own customers, cannot feel very acutely on the subject; and, indeed, we feel rather inclined to join with Lady Harborton, who points out that even the ladies, whom we always associate with everything delicate and nice, show but little sign of sensitiveness in this nasty subject, or they would not walk about in trailing skirts. With such indifference on every side, much as we may grumble and dirty as the habit is, we fear that it will persist. Still, if a desire to go to Paris should lead a "few "spitters" to train themselves in better ways, we shall certainly wish every success and many visitors to the exhibition.—*Hospital*.

Ovarian Insufficiency.

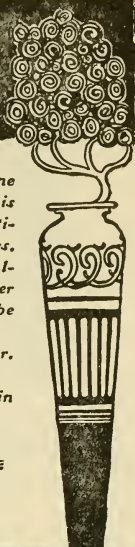
F. Jayle, in *La Presse Medicale* of March 17, 1900, uses the term ovarian insufficiency to describe those cases characterized by hypofunction. These disturbances are not well understood. From a clinical standpoint he studies these symptoms to determine if they are due to suppression of the ovarian secretion, and if this can be diagnosed by the character of the symptoms themselves. He comes to the conclusion that such a diagnosis is possible if the inquiry is especially directed to determine whether the disturbed function is transitory or constant, and if the pain starts directly from the ovary. The treatment is to be based largely upon the pain. Valuable indications are reached by the use of desiccated ovaries or ovarian extract. The physical examination is by no means so important; ovaries which are cystic and enlarged may contain more normal ovarian substance than those which appear quite normal as to size and consistence. The latter, however, may be in a condition where all normal ovarian substance has been replaced by sclerotic tissue. In the surgical treatment of such ovaries, whether cystic or sclerotic, it is always proper to remove all of the diseased portion, as such pathogenic tissues are devoid of function. All healthy ovarian tissue should be preserved.—*Medicine*.

"My grandpa had a perplexity fit yesterday," said little Bessie to her playmate.

"Perplexity fit!" exclaimed the other, "I guess you mean a parallel stroke, don't you?"



Cystogen



Cystogen is the indicated remedy whenever the urine is cloudy, turbid, putrid or ammoniacal. Cystogen is the most efficient genito-urinary germicide and antiseptic and possesses remarkable solvent properties, preventing sediments of urates, phosphates and oxalates. CYSTOGEN is not antagonistic to any other medication, neither has it any interference with the digestive functions.

Administration:—5 grains, dissolved in water, four times daily.

Obtainable in crystalline powder and in 5 grain tablets.

Literature and samples on application.

Cystogen Chemical Co.

St. Louis, Mo.

B 38

Bacteria Found in Gangrene of the Lung Simulating the Tubercle Bacillus.

Dr. Rabinowitch, Berlin, demonstrated in the excretions from the mouth of an individual who afterwards died of gangrene of the lung, a bacillus resembling in many respects the tubercle bacillus. The same were found in the abscess cavity after the death of the patient. The author considers these organisms identical with certain forms that have been found in feces, butter, timothy, and also the smegma bacillus. Tinctorially, they are similar to the tubercle bacillus, but the appearance of the cultures and the pathogenic manifestations differ materially. This is the first time the author has succeeded in obtaining from the sputum bacilli that resemble greatly the tubercle bacillus, and yet can be differentiated from it. This point is of great importance in the diagnosis of doubtful pulmonary affections.—*St. Louis Medical Review.*

There is a woman in Allegheny who dearly loves to use big words, and does not always use them correctly. The other day a neighbor complained of pain in her back, whereupon the user of big words said: "I would consult Doctor Pellets for pain in the back. He's the finest bacteriologist that I know of."—*Pittsburg Chronicle.*

The Philadelphia Board of Education has adopted the following requirements in regard to the hygiene of schools: The temperature of the room must not be permitted to be under 65 deg.; nor over 67 deg.; occasional hygrometric tests are to be made to assure the moisture being kept at 55 deg. to 65 deg.; there is to be an air-supply to hot-air furnaces; air-ducts are to be at least four feet above the ground; windows of class-rooms are to be raised for ten minutes during recess; teachers are to prohibit expectoration on the floors, and eating candy at recess; janitors will scatter sawdust on the floor before sweeping, wipe desks and seats with a wet cloth once a week, and wash floors, doors, and banisters with hot soda solution; during epidemics they will disinfect the rooms with formaldehyde; drinking-water should be boiled; ordinary slates are to be adolished; and overcrowding of pupils in the different class-rooms is to be prevented. Beginning with October next tests of the hearing and eyesight will be made, and individual drinking-cups employed.—*Medical Age.*

The man who eats cloves
May disguise his condition;
But he's never quite free

From the breath of suspicion.

—*Boston Budget.*

A Blamed Sight Worse.

A bachelor, old and cranky,
Was sitting alone in his room;
His toes with gout were aching,
And his face o'erspread with gloom.

No little ones' shouts disturbed him,
From noise the house was free;
In fact, from the attic to cellar
Was quiet as quiet could be,

No medical aid was lacking;
The servants answered his ring,
Respectfully heard his orders,
And supplied him with everything.

But still there was something wanting.
Something he couldn't command;
The kindly words of compassion,
The touch of a gentle hand.

And he said, as his brow grew darker,
And he rang for the hireling nurse:
"Well, marriage may be a failure,
But this is a blamed sight worse!"

—Our Dumb Animals.

Surgical Hints from the International Journal of Surgery.

In operating, there is nothing that wastes more time than to have all the instruments at a distance from the operator, thus necessitating the services of an assistant to hand them as they are needed. They should be placed near the operator, on a little table, or near his first assistant, if one is employed, and should be taken up as needed from the pans in which they lie. It is much easier to help one's self to instruments than to wait until they are brought, and it does away with one assistant.

Never use force in irrigating a cavity. The best way to do this, if it is possible, is to simply pour in the water gently from a convenient vessel. If a douche bag, or similar apparatus is employed, use only as much pressure as will allow the water to run out quietly.

In arriving at a diagnosis in cases of cancer of the breast, it is well to remember that pain is not a necessary symptom, and that, as a matter of fact, women often go on for a number of months without noticing that there is a swelling in their breast. As a rule, it is a non-sensitive swelling at first, and this very often deceives the patient, and sometimes, strange to say, the medical attendant.

In cancer of the breast, when making a diagnosis in the early stages, do not attach undue importance to the absence of retraction of the nipple. This is often a very late symptom, especially if the neoplasm

first involves the periphery of the gland.

In chronic constipation occurring in children, do not rest satisfied with prescribing laxatives. The anus should be carefully examined. The trouble may be due to fissures which, by producing painful contractions, always cause the child to avoid going to stool as long as possible. These fissures are found in the folds where the skin merges into the mucous membrane. If the child gives such evidence of pain that you cannot examine the anus readily, this fact alone constitutes good evidence that fissures are present.

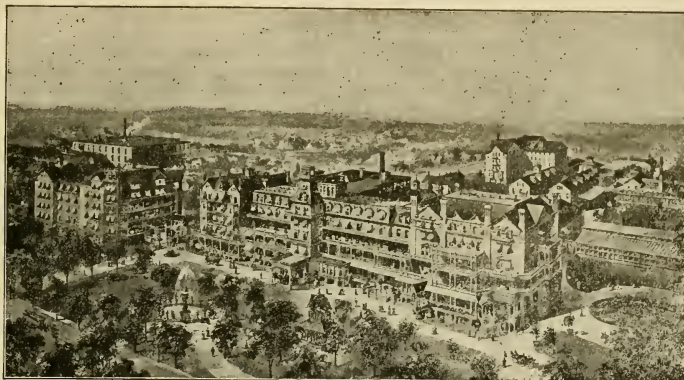
If possible, never operate on people who are showing active manifestations of syphilis. It is always better to place them on appropriate treatment first.

Surgical operations and cases of midwifery, occurring in malarial patients, are very apt to cause an active manifestation of this disease. In preparing patients for operation, give them daily doses of quinine, if they have a malarial history, or if they come from a notoriously malarial district.

Anyone who witnesses the blanching effect of suprarenal extract upon the conjunctiva for the first time is impressed with the great possibilities in store for this agent in the treatment of diseases of certain mucous membranes, and especially hay-fever. The chief hindrance to its convenient use heretofore has been the necessity imposed upon the physician of preparing fresh solutions.

Messrs. Parke, Davis & Co., with commendable enterprise, have recently brought out a fine extract of fresh suprarenal gland, which is known commercially as "Suprarenal Liquid with Chloretone." This preparation is in several respects unique; it is vastly superior to extemporized solutions of the dried gland, since it has been shown that in the drying process the adrenal loses much of its virtue: it is permanent and, therefore, always ready for use in emergencies or in the daily routine of the office.

It is interesting to note that the permanence of this preparation is attended by the addition of that remarkable drug, Chloretone, which in addition to its nypnotic property, is also a valuable antiseptic, and a local anesthetic as well. The local anesthetic effect of Chloretone (which is entirely free from the dangerous properties of cocaine) and the powerful vaso-motor action of fresh suprarenal extract are skillfully combined in this new remedy compound. We predict it will soon come to be recognized as a veritable *sine qua non* in the treatment of hay-fever and diseases of the nose, throat and eye.



The Battle Creek Sanitarium

Is a place where chronic invalids, especially those suffering from the various forms of indigestion, diseases peculiar to women, constipation, chronic malarial poisoning, anæmia, obesity, the uric acid diathesis, neurasthenia, migraine, and similar ailments are trained into health by the aid of systematic regimen, scientific hydrotherapy, massage, Swedish movements, Swedish gymnastics, and other rational means. Most cases of Bright's disease, diabetes, locomotor ataxia, and many other maladies which are incurable under ordinary conditions, are greatly improved by the combined use of rational remedies and systematic regime, and many are practically cured. Extensive bacteriological, chemical, and microscopical laboratories connected with the institution afford excellent facilities for accuracy in diagnosis and original research.

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Dooley on the "Antis."

"Do ye go down, thin, to Doctor Casey at the dhrug stote an' git him to give ye a bottle av that mixture he gave me las' year. 'Tis not plisant to take, but it goes at a col' like an Irish lan'lord ayvictin a tinant. Sthrong med'cine f'r sthrong men. I was three weeks thryin' to starve off noomony iv th' lungs with th' shavin's of slate pencils that th' good doctor down be Halsted sthreet calls aunty pyreen, an' aunty cammyoo, an' aunty this-an'-that-an'-the-other-thin,' when th' las' breath in me body I crawled to see Casey. He was a horse-shoer wanst, an' he mixes his med'cines in an anvil. He says, says he, 'I'll fix ye in a minyet,' he says; 'I've something here that cured Mullaney's horse,' he says, 'an' 'twill make ye r-right in no time if ye have the stren'th to take it.' I took wan dose iv it an' whin I come to I was cured. Anny disease that's pow'rful enough to get hold on Terence needs to be treated like a fire in a furniture facthry. Don't

waste time on thim aunty med'cines. They were intinded to make sickness a perm'nint luxury. Git Casey's mixture f'r man an' baist, put him to bed, flay a mustard plaster on him that'll keep his mind employed, an' lave oim to fight it out. May th' best man win. If Terence's alive in th' mornin' he'll not have stren'th to cough. If he ain't, do ye let me know.'

—*Ladies' Home Journal*.

Patient: Why do you watch the thermometer on the wall so closely?

Nurse: Because the doctor said if the temperature riz I should give you the quinine.

Tooting.

A tutor who tooted the flute,
Tried to teach two young tutors to too';
Said the two to the tutor,
"Is it harder to toot or
To tutor two tooters to toot?"

Sanmetto in Prostatitis and Cystitis.

Dr. F. R. Dobson, of New Orleans, La., Late Surgeon U. S. A., writing, says: "While Surgeon in First Division Hospital, stationed at Jacksonville, Fla., I had occasion to see an interesting case of prostatitis treated with Sanmetto, with entire success. The patient was a private in the Second Nebraska Volunteers, and his condition upon entering the hospital was deplorable, the bladder being distended with urine, the overflow dribbling constantly. His condition was traceable to gonorrheal infection. Since my return to New Orleans I treated with Sanmetto a case of purulent cystitis, which had resisted all other treatment. The result of the taking of one bottle of Sanmetto was permanent relief."

Sweating.

God's original plan for man, says Dr. Paulson in Good Health, after sin entered the world, was that he should work hard enough to cause him to sweat. Man, however, has sought out many inventions, and a most pernicious one is the determination to get through this world without working hard enough to induce perspiration. But a human being instinctively feels the necessity for perspiring, and so it has come to pass that Turkish bathrooms without number, and endless contrivances substituting the same to be utilized in the home, have been established, and man imagines that he is getting as much good from sweating this way as he would if he induced perspiration by substantial labor; but experiments have demonstrated the fact that nature cannot be outwitted so readily.

The sweat induced merely by applying heat to the skin contains but a small percentage of waste matter as compared to that which is eliminated during vigorous exercise. The obese person who flatters himself that he can sweat away his flesh instead of honestly working it off will find sooner or latter that his theory is a delusion and a snare.

However, it must be admitted that there are some beneficial results obtained by vigorous hot treatments in certain forms of disease, and in this way the individual may do penance for what he neglected to do in the right way during health. But, as a general principle, hot treatments are weakening and enervating, while short, cold treatments are tonic in their nature. Hot treatments feel pleasant while they are being taken; but too often they leave a listless, all-gone feeling when they are discontinued. It requires moral courage to take a cold spray or sponge, but the beneficial

after results remain with the individual all day long.

The man who forges some one's name upon a note is generally a legitimate product of the idea that there is a better way of getting through the world than by working. The average tramp found camping on the axle of the freight car is a degenerate type of humanity, resulting from identically the same philosophy. "Abundance of idleness" was one of the reasons for the overthrow of Sodom, and it lies at the foundation of the moral and physical decay of thousands of individuals to-day.

The proper remedy is to imbue a man with the thought that an hour's work with an axe in his hand at the woodpile in the back yard is worth more to him, morally and physically, than the same length of time spent on a marble slab in a Turkish bathroom.—*Practical Medicine.*

The Most Ungrammatical.

A literary man who has just returned from the anthracite coal region of Pennsylvania says that he found a great quantity of "local color" there. He also says he heard the most ungrammatical sentence while there that ever came under his notice. He was strolling through a mining village in Schuylkill County when he heard a woman calling, and at some distance off saw several children who were playing in the road. When he reached them he said kindly:

"Your mother is calling you, children."

The largest child, a girl of about ten years, turned to him and said:

"Her ain't a-callin' we; us don't belong to she."—*New York Times.*

There have been several serious accidents recently with automobiles in New York city. A doctor's page was killed by a head-on collision with an automobile. The boy was riding on a bicycle. One of the most prominent citizens of Binghamton was thrown from a runaway automobile, and sustained fatal injuries. The machine began running from side to side, refusing to respond to the controlling lever. When it reached a speed of 30 miles an hour it struck the curb, throwing the two occupants out. The machine continued its erratic course down the street, and was finally stopped by obstructions thrown in front of it by pedestrians. The wheels continued to churn the air for some time; the vehicle itself was not injured.—*Scientific American.*

SUMMER HEAT: Its Ill Effect Upon Infantile Life

Whilst it is not contended that summer heat, *per se*, exercises any ill effect upon infantile life, the intense heat of summer, coupled with improper diet and unsanitary surroundings, undoubtedly will increase the mortality among infants. Artificially fed babies especially suffer.

A wise saying of the ancients, *obsta principiis*, has special application here. The importance of cleanliness, appropriate food, and regularity in feeding should be impressed upon the caretaker of the infant.

From the writings of medical practitioners of wide experience in this field, we have compiled a pamphlet which we designate the "Summer Pamphlet." In it will be found many highly valuable suggestions for the care of infants and children during the heated term, together with various formulæ suggesting treatment for infantile digestive disturbances, all of which tend to show that the base of many successful prescriptions for "summer complaint" is

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Lambert Pharmacal Company,
SAINT LOUIS.

The Lesson of a "Scorching" Tragedy.

A sad story appears in the New York Times for June 11th. A young bicyclist was running a race with a trolley car. When he showed signs of tiring, the jeers of the men on the car spurred him to renewed effort, which was further encouraged by the favoring smiles of the ladies at his renewed efforts. Then came the tragedy. The onlookers, sitting at their ease in the car and themselves risking nothing, "saw him regain what he had lost, go forward a couple of feet, and then plunge headlong from his wheel. Blood was pouring from mouth, ears, and nostrils, and he was badly cut and scratched"—and dead! No wonder that the reporter has occasion to add that, after the part they had played as unintentional causes in this tragedy, "the young men and the young women slowly returned to their car. The young men did not jeer again. The young women had no heart to smile." This principle of "record-breaking" and of insatiable attempts to outdo others is the bane of the age. It is urged that it is the very life of progress. We do not think so. There would be just as much real progress—nay, more—in all careers in life if men would leave off pitting themselves so eternally against each other, and pit themselves instead against their own best without regard to what others might have done or be doing. Let each man strive in every walk and relation of life to attain the best of which he is capable, with due regard to the harmony of his own best interests, and let him neither mind if he is distanced by others on the one hand, nor be satisfied though he beat all the world on the other, yet fall short of the standard of his own capabilities. So will the harmonious progress of the race be better assured than by all the "record-breaking" and "scorching" possible.—*N. Y. Medical Journal*.

Infectious Diseases and Appendicitis.

In the *Année Médicale de Caen*, Le Clerc reports a case of appendicitis in which are shown the relations that can exist between appendicitis and infectious diseases. Patient 11 years of age; no previous illness; for four days showed premonitory symptoms of measles complicated by painful phenomena in the appendiceal region. The appendiceal symptoms subsided somewhat on the appearance of the measly rash, but McBurney's tender point persisted during the eruptive stage and disappeared two days after the eruption. For the last several years, there has been a discussion going on as to the relation existing between infec-

tious diseases and appendicitis. Appendicitis is often preceded or accompanied with catarrhal manifestations of influenza. It is not only in influenza that appendicitis can be a local manifestation of a general disease; lesions of the appendix have been found in typhoid fever, in scarlatina, in variola, in mumps, in varicella and in measles. In these cases the appendicitis is catarrhal. It disappears with the general affection. Surgical measures are not indicated.—*Medical Standard*.

Study of Ko-sam.

We find in a recent number of *Le Progrès Médical* a note concerning the experiments of M. Mougeot in Cochin China with a Chinese remedy called "ko-sam." It is an oleaginous grain, and appears to be derived from the *Brucea Sumatrana*, of the natural order *Simarubæ*. The grain is particularly employed by the Chinese and the Annamites in hæmorrhage, and especially hæmorrhage from the womb. M. Mougeot tried the drug in the case of a female prisoner at Saigon who was attacked simultaneously by metrorrhagia and dysentery. He was not a little surprised to witness amelioration of the dysentery. He administered the same drug to other patients suffering only from dysentery, and was astonished by the good results which he obtained among the natives. M. Mougeot gave the remedy in doses of 5 grains the first day and 6 upon succeeding days among children. With adults he began with 10 grains and increased to 12. Ko-sam sometimes caused vomiting. On the first day blood disappears from the stools and the pain abates. On the second day mucus diminishes, and cure is completed by the fourth or fifth day. It is not necessary to regulate the diet. Its use should be avoided in women during the menstrual period. In too large a dose ko-sam may cause cerebral congestion. M. Mougeot has successfully experimented with it in rebellious diarrhœa.—*Medical Bulletin*.

Precautions Taken to Keep the Plague of Women from the Hospitals of South Africa.

Surgeon-General Jameson, speaking a few days ago at a medical meeting in London, and referring to the "plague of women" of which Mr. Treves had complained as infesting the hospitals of South Africa, said that already Mr. Treves' remarks had borne fruit, for he was informed that the engineers had encircled with barbed wires the hospital containing cases of enteric fever.—*Medical Record*.

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Should the Doctor Strike?

Very popular, or, at least, very prevalent, are strikes just now. Shall physicians, who are ready to adopt anything that is for the public good, adopt the methods of other labor unions? Why not!

Other workers strike because they are not paid enough. Physicians never do; they rather encourage slow pay and big reductions. Some unions want shorter hours, but the physician knows no limit of hours; the busy physician works night and day, the others would like to.

Labor unions strike if their unions are not recognized and if their departments are over crowded, but the physician, poor as he may be, throws open the gates of medical colleges and calls in the lame, halt and the blind, if the ranks cannot be otherwise filled.

The carpenter and mason continually seek to increase the demand for their labor, while the physician by sanitation, quarantine, vaccination and everything else that he can command, tries to lessen his field of labor.

If the physician were a true "union man" he would ask for better wages, regular hours, the throwing over of all patent medicines and the throwing down of all quacks. He would shut up three-fourths of the medical colleges to prevent over-crowding, and would disseminate the germs of new diseases instead of stamping out the old. He would demand as a right that he should dictate to the public what he thought best, from his own standpoint, for health and morals. If not granted, he would strike.

If he could not succeed by himself, he would ask the grocer to sell no sugar, the butcher no meat and the water department no water till he gained his point.

This may be all right in theory—but think of a doctor striking.—*The Stylus*.

The Portal Circulation.*

In a large majority of troubles that come to our attention the first manifestations are indicated by the liver, and if the function of this organ can be restored to a normal condition a great many of these troubles can be absorbed. Chronic constipation often starts in a congested or obstructed portal circulation and soon all the incidental manifestations of constipation are evidenced. In congested or obstructed portal circulation we want to remedy several conditions. One is to relieve the engorgement of the liver, another to remove the excess

of bile in the gall bladder; another to increase the peristaltic action of the small intestines; and to see that the rectum is free from impacted feces. The rectum and liver are intimately associated through the hemorrhoidal arteries and irritation of the rectum deranges the liver, and vice versa. Drastic purges or cholagogues are not indicated, but a stimulating cholagogue which empties the gall bladder is preferable. The bile in the intestinal tract increases the peristalsis and in some cases this movement has to be assisted. These indications are fulfilled in the use of Chionia, which is an hepatic stimulant, and indirectly but surely a reliable laxative.

In the treatment of derangements of the portal circulation, if the lymphatics are strengthened and stimulated we get an amelioration of the symptoms. Drastic purges are generally used for this purpose, but they will frequently congest the hepatic glands, and in all probability increase the constipation already existing. Chionia stimulates the hepatic glands without producing congestion, and also increases the secretion of bile. Through its regular action on the liver, the functions of this organ are increased or restored to normal. In the use of all drugs which act as laxatives or purges it is of great importance that the rectum should be free from impacted feces, and enemas should be used for this purpose, in preference to suppositories, for the latter will often cause a rectal irritation.

Experience with Tannigen.

Dr. C. M. Clark (Therapeutic Gazette, June 15, 1900) reports an interesting case of diarrhea phthisis, with watery discharges from the bowels every hour or two, which had greatly diminished the patient's strength and vitality. After resorting to all the customary measures he made use of tannigen, which had the effect of reducing the passages to two a day, and of rendering them more solid. Since observing the beneficial action of the drug in this case he has employed it extensively during the past year for the treatment of all watery discharges from the bowels in combination with subcarbonate of bismuth and resorcin. His cases comprised diarrhea of nervous or inflammatory origin, or resulting from acute dyspepsia due to over-feeding as well as over-stimulation, which gives rises to flatulence with foul smelling serous discharges. According to his observations Dr. Clark believes tannigen is worthy of a more extended investigation by the profession.

*By T. E. Converse. M. D., Louisville, Ky.

ODOZONE—MERRELL.



ODOZEN—an iodine derivative of methyl salicylate (true oil of wintergreen) It has an agreeable odor, is non-irritant, and combines the antiseptic, discutient, alterative and absorbent qualities of iodoform without any of its characteristic disadvantages.

The iodine being liberated very slowly in the presence of heat and moisture, no toxic effects may be apprehended.

The density of Iodozen is less than that of iodoform, hence a given quantity will cover a larger surface; it is, therefore, more economical.

Iodozen is absorbed slowly and adheres to sores and mucous membranes for a considerable period, and in the meantime exerts a protective as well as antiseptic effect.

These qualities place Iodozen in the front rank of antiseptic applications in the treatment of aural, venereal, and cutaneous diseases, in minor surgery and catarrhal affections of the uterus and nasal mucous membranes.

Iodozen, when mixed with powdered boracic acid in the proportion of 5 to 10 per cent. and used by insufflation, is of value in post-nasal catarrh and ulcerated conditions of the throat, but in specific lesions it is advisable to apply Iodozen pure, in order to produce the necessary antiseptic impression.

A useful dusting powder for the chafing of infants is made by combining Iodozen 5 per cent. with powdered starch—in erysipelas, Iodozen may be advantageously applied to the inflamed surface undiluted.

Combined with vaseline or lanoline, Iodozen forms an ointment of general utility as a healing application, and for the relief of puritis ani and vulva, hemorrhoids, prostatic irritation and gonorrhœa, in which affection it may be used as an injection.

Additional therapeutic applications:

Acne Rosacea	Eczema of auditory canal	Prurigo
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Abscesses	Impetigo	Sun-burn
Burns	Irritation of the skin	Septal ulceration,
Balanitis	Ozœna	syphilitic or traumatic
Catarrh	Otorrhœa	Tinea tonsurans
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Butter without Milk.

It is not generally known that in many parts of the world clay is eaten on bread as a substitute for butter. This is termed "stone butter," and is used in many parts of Germany. In northern parts of Sweden earth is often baked in bread, and is sold in the public markets on the Italian peninsula as well as on the Island of Sardinia. In Persia certain kinds of soil were used in the manufacture of confectionery, and it is probably from the Persians that confectioners in western Europe learned to use terra alba for the same purpose. In Nubia and other tropical countries it is used as a medicine as well as a food. This practice probably had its origin in the knowledge that all earths have some kind of flavour, and take the place of salt, a necessary ingredient in all kinds of food.—*Family Doctor*.

The Contrition of a Converted Antivaccinationist.

The Maryland Medical Journal quotes the following letter from the British Medical Journal:

"71 WALLER ST., HULL, Feb. 28, 1900.

"Dear Sir—I was an antivaccinator before that dreadful disease, small-pox, set its foot into my home. First it attacked my middle daughter, Frances Emily, and when I called the doctor in to attend, his first words were that this is an unvaccinated case of smallpox, and he said this child is unvaccinated, and this is what you are reaping. Well, sir, that doctor had never seen that child before. From then I began to alter my opinion as regards vaccination. To tell the truth, my wife, myself and oldest daughter, Annie, got vaccinated; my son, Willie, was ill with bronchitis, and the doctor would not do him. My oldest daughter, Annie, would not take, but she had been done when an infant, and was under ten years of age. My wife and myself took the vaccination, and at the same time we had the smallpox on us. Our daughter was taken from us on December 6th, and died on December 12th, and on December 16th, my wife, myself and my son were taken to the hospital, and on the 20th my son died. So you will see that *both of my children that were unvaccinated took the smallpox and died*. My wife and myself were vaccinated when infants, and revaccinated, and to which I owe my life. In regard to the unvaccinated cases, they are a cruel sight to see, and ought to be a lesson to all honest-minded people that have seen them suffer. My wife and myself would have had our children vaccinated if it had cost us

twenty pounds, but, sorry to say, it cost us our two dear children. We are as strong now for vaccination as we were against it. Seeing what we have seen in the hospital will open one's eyes. I can say this for revaccination, that it is a very stimulating thing for smallpox. It is one of the best safeguards that the public can take. Yours truly, (signed) WM. JAS. TAYLOR, 71 Waller street, Holderness Road, Hull. P.S.—You can publish this letter for public information on condition that you send me a copy of the paper. From one that has had to pay for his foolishness."

It is a pity that so terribly severe a lesson has been needed, but experience is a hard schoolmaster. Every parent should take to heart this object-lesson, providing as it does an example of the way in which smallpox differentiates between the vaccinated and the unvaccinated in the same household.

Gynecology in Nervous Disorders.

Many nervous troubles in women have their origin in affections of the genital organs, and hence in order to affect a permanent cure the condition of the latter must be carefully inquired into and corrected. Neurasthenia, epilepsy, various types of neuralgia, and even insanity, may be caused or any rate, markedly aggravated by reflex irritation from uterine or ovarian diseases. While in some instances cures have been reported from surgical measures in these cases, failures have been far more frequently observed, and especially is this true of cases of insanity. It is certain that much more promising results can be secured from topical medication of the effected genito-urinary tract in the earlier stages of the case when it first comes under the care of the general practitioner. A prompt resort to local treatment is much more likely to effect a cure than subsequent recourse to mutilating operations. A plan of topical medication that is particularly adapted for these patients consists in the use of Micajah's Medicated Uterine Wafers. Their application is most simple, convenient and cleanly that they are well tolerated even by the most sensitive patients. Under their use the congestion and inflammation of the affected parts gradually subsides, the irritation is allayed, and the mucous membranes regain their normal tonicity. Conformably with the disappearance of the genital disease the nervous symptoms vanish, and if this local treatment is combined with the use of nervous tonics, hygiene regulations, proper diet, etc., a complete restoration of health can usually be expected.

Excessive Smoking.

Dr. Emil Meyer said that while excessive smoking undoubtedly does harm, the objection to the use of tobacco may become fetish. Atrophic conditions of the nasal and pharyngeal mucous membranes occur also in females and in that class of females who do not smoke. In the same way alcohol is undoubtedly a serious factor in certain laryngeal conditions and yet the taking of moderate amounts may do no harm. There are extremes in the condemnation of alcohol and tobacco to which laryngologists should not go.

The electric cautery can never be condemned enough. The inventor of electric cauterization methods for the nose has undoubtedly a great deal to answer for. A distinguished specialist in rhinology said not long ago that the main part of his time was occupied in breaking down the synechie of the nasal mucous membrane that had been left by electric cautery in the hands of the would-be rhinologist and the general practitioner. The galvanocautery certainly has a very limited place in the therapeutics of nasal diseases. The operative field for the specialist in rhinology must concern especially the treatment of the accessory sinuses of the nose. These the general practitioner can scarcely be expected to touch. He may put his patient into good general condition in order to be sure that the nasal symptoms will not disappear when this is done, and then, if there are symptoms that seem to implicate nasal sinuses, he should send his patient to a reliable specialist. For the specialist, under these circumstances, the best advice is Davy Crockett's maxim, "Be sure you're right, then go ahead."—*Medical News*.

The latest phase of the agitation in Italy against foreign medical practitioners is, according to the Medical Record, the approval by the government of a bill now before the chamber of deputies, in which it is forbidden to any one not possessing Italian qualifications to practice anywhere in the peninsula. To this there are two exceptions: The law is not effective against a foreigner who may be summoned in consultation in any special case, or who is in attendance upon a family or individual traveling or temporarily resident in the country. The second exemption is in favor of those who confine their practice strictly to foreign visitors, with, however, the fatal proviso that these practitioners are citizens of countries which accord the same privileges to Italian physicians.

THE ALKALINITY OF BLOOD SERUM

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Corrects hyperacidity
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Administered internally Glyco-Thymoline (Kress) acts as a carminative, antiseptic, alternative, stimulant, antacid and meets many of the requirements of the physician during the summer months.

_____, M.D., Cleveland, O., reports among other cases, as follows:

John T—, two months old baby, typical case of Cholera Infantum, had small hopes of saving the little one; put him on equal parts of Liq. Bismuth and Glyco-Thymoline (Kress), one-half teaspoonful doses every three hours. It controlled the vomiting and regulated the bowels and the child made a nice recovery.

_____, M.D., Washington, D. C., writes:

I have used Glyco-Thymoline (Kress) very successfully the past season in many serious cases of dysenteric troubles as also in other alimentary ailments with great benefit.

Feb. 16th, 1900.

_____, M.D., Cleveland, O., states:

He has used Glyco-Thymoline (Kress) in nose and throat inflammations and Gastritis, and during the summer he has tried it in a number of cases of Cholera Infantum. The formula is the proper one for such purpose. I notice a change in the stools in some cases in three or four hours after administration of the remedy, discharges lessen in frequency and assume a normal character.

SPECIAL OFFER.

A full-size bottle of Glyco-Thymoline (Kress) will be sent to any physician who will pay express charges.

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Treatment of Catarrhal Conjunctivitis.*

Either as it appears as a simple catarrhal inflammation of the conjunctiva, affecting one individual or when it is encountered in an epidemic, there is no doubt but that catarrhal conjunctivitis is an affection of great importance. This affection is essentially simple, but if allowed to go long without correct treatment it may terminate in entire loss of vision. However, if the affection be given proper and timely attention it yields with great readiness to treatment.

Either as simple catarrhal conjunctivitis seen in a single individual, or when the affection manifests itself in the epidemic form the treatment is essentially the same. Of course individual peculiarities in each case make certain indications fitting and even imperative. One thing which a large experience with the disease has taught me is, that prompt and systematic treatment must be instituted in every case. Often patients with strumous diathesis will have chronic conjunctivitis, and persons whose health is poor will also have protracted forms of the affection, with the loss or great impairment of sight, when if proper and timely treatment had been instituted a cure could have been effected within a very short time. In the treatment of catarrhal conjunctivitis there have been many mischievous measures brought to bear.

All and everything which produces irritation will render all the elements in the case worse. We must never employ strong solutions. A lotion composed of 10 grains of sulphate of zinc to an ounce of distilled water will aggravate any case. All lotions must of necessity be mild and soothing.

As a curative means I have come now to rely on what I term the antiseptic treatment. This has been productive of better results in my hands than the old-time remedies.

In carrying out this treatment I first have the nurse to bathe the eyes thoroughly with this antiseptic mixture:

R Hydrozone, 3j.
Aqua, q.s. ad 3iv.

This mixture is used three or four times daily, as the case may appear to demand. Just as often as this mixture has been copiously applied and the eyelids have been dried, I apply, by means of an ordinary glass medicine dropper, two drops of Marchand's Eye Balsam.

This remedy reaches every part of the conjunctiva by the movements of the lids, and is not irritating; the patient generally makes rapid progress to recovery.

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three days. In fact my success has been such that I now rely upon this treatment entirely in this affection.

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Mr. Samuel S., age 39. This patient had been suffering, as he put it, with "sore eyes" for three days. It was a simple case of catarrhal conjunctivitis, but gave him discomfort. On the treatment described above he entirely recovered in two days.

Mrs. Laura S., aged 22. This patient thought she had something in her eye, but examination revealed catarrhal conjunctivitis. On this treatment she made a speedy recovery.

These are only two of the several hundred cases treated on the antiseptic principles.—*Medical Summary.*

Confidences.

"Please don't mention it." "Of course it's between ourselves." "I know you'll not give me away," etc., who is not daily made familiar with such formulæ of implicit trust? There is an absolute want of dignity in these whiffling phrases which do little credit to the heart or the intelligence. The true basis of character lies in self-poise—the equilibrium attained by reliance upon individual thought which does not hasten abroad to chatter about neighbors or rely upon alien sympathy. Keep your own counsel, and, when tempted to risk betrayal of gossip by binding promises, remember Larochevoucauld's searching query: "How can you expect another to keep the secret you could not keep yourself?"—*Doctor's Magazine.*

Persian Dinners.

Persian dinners are very much like ours, turned the wrong way round. The feast is preceded by pipes, while tea and sweets are handed about. Then the servants of the house appear, bringing in a long leather sheet, which they spread in the middle of the floor; the guests squat around this, tailor fashion. When all are seated a flat loaf of bread is placed before everyone, and the music begins to play. The various dishes are brought in on trays, and arranged round the leather sheet at intervals. The covers are then removed, the host says "Bismillah" (in the name of God), and without another word they all fall to.—*Family Doctor.*

*By Milton P. Creel, M.D., Central City, Ky.



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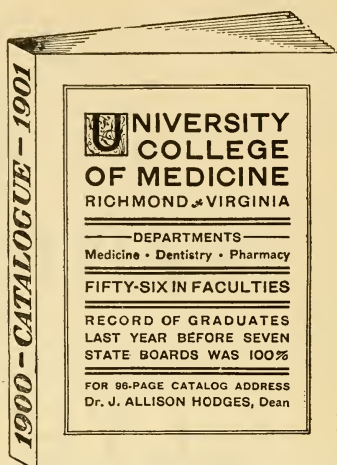
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Suicide in a Private Asylum.

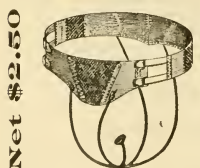
In the Journal de Medecine de Paris of April 8, 1900, is an account of an exceedingly interesting case in which judgment was returned against a physician in charge of a private asylum in France. The patient was a young woman affected with suicidal mania, who had been placed by her parents in a private institution for the insane. The girl, while in the care of the nurse, asked to retire to the closet. As soon as she had entered she locked the door, which she was able to do by the aid of a bolt on the inside. The nurse attempted to gain admission, but did not succeed, and when

help was obtained and the door broken in, it was found that the patient had suicided by suspending herself with a band of cloth to the fastening of the window. An action was brought by the parents claiming neglect on the part of the physician. In the trial it was claimed that the father of the unfortunate patient had called the attention of the physician to the danger of just such an attempt made in the manner in which it occurred, to which the physician responded carelessly that there were other means which the patient would probably choose. Judgment was returned for the entire sum demanded—ten thousand francs.—*Medicine.*

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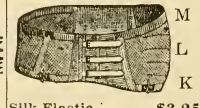
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Blood-Letting in Italy.

In some parts of Italy blood-letting is still held to be a cure-all. Some time ago a sick child was bled until the mother timidly protested. The doctor assured her that one more application of the cups would ensure recovery. In spite of this, the next morning, when the doctor came, the mother sobbed out that baby was dead. "Madam," said the doctor, "be comforted by knowing that your child died cured."

Frozen Water Pipes.

An interesting experiment in the application of electricity to the thawing out of frozen water pipes have been recently made in Canada by a professor in physics. The professor takes the electric current used for street lighting purposes, attaches one wire to the frozen pipe inside the cellar of one house and the other wire to a similar pipe in the adjoining or any other house, thus

completing the circuit. A current of about fifty volts is then turned on, heating the pipes and melting the ice within.—*Family Doctor.*

One of the features of the Exhibition of Hygiene at Naples is a reproduction of the heating, lighting and water-supply arrangements of a Pompeian house. Naples now boasts of the finest water-supply in the world since the waters of the Serino have been piped into the city, and the transformation of most of the famous Naples slums into handsome boulevards during the last ten years is an interesting feature to be seen in connection with the exposition.—*Four. A. M. A.*

Teacher—Tommy, if your mother had ten dollars and your father should give her five more, what would she have?

Tommy—She would have a fit.

The Charlotte Medical Journal.

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CHARLOTTE, N. C., SEPTEMBER, 1900.

No. 3.

Infantile Diarrhœas.*

By M. H. Fletcher, M.D., Asheville, N.C.

The subject of infantile diarrhœas is one of perennial interest and will continue to be of interest till we arrive at better results in its management and treatment. The number of children raised artificially is increasing each year. The number of healthy mothers who cannot or who will not nurse their offspring is increasing likewise.—Every child born has an inherent right to life. The mother who can and does not nurse her babe is guilty of a crime. She has no right to deprive her helpless infant the chance of life.

I am not giving you anything new when I state that the highest aim of the physician is "*to save human life*." Yet how often do we fail to do our whole duty by not impressing on these mothers the consequences of a failure to nurse their children. How often do we fail to give full and explicit directions as to the proper management and diet for the babe who is denied, what I claim to be an inherited right of every infant—mother's milk. The risk of raising a child to be one year old increases ten fold when deprived of mother's milk. How often is the feeding of the infant left to the mother whose lack of knowledge on this subject leads to serious results. No doubt many of you can recall to mind instances in which mothers in their anxiety to raise their first born would try this, that and the other experiment made by soliciting friends, and the baby has been sacrificed on the altar of "getting experience." Experience of this kind is too costly. It is the duty of the family physician to supply this information. The doctor should study each individual case and give the mother specific and direct information as to proper food and surroundings for these children. Preventive medicine, which for twenty years has been held out to us as the ideal, will do more to save this class of diseases than any other. Preventive medicine, so far as I am able to judge, is progressing very slowly, but we ought not to be discouraged when we look back and see how our neighbors, those gifted

in arts and sciences, took two thousand years, as we are told, to advance from a two-pronged fork to one having four prongs.

The foul, fœtid, sour smelling nursing bottle is responsible for a great many ills. The profession owes it to the laity to educate them on this subject of infant feeding. There is a vast amount of ignorance on it. How many people who are sensible in the ordinary affairs of life, will even now, as we near the 20th century, insist in giving table food to the delicate, poorly nourished, toothless infant with impaired digestion and one who is handicapped often by being born of scrofulous, tuberculous or otherwise diseased parentage. We could at least teach these mothers the gross difference between mother's milk and cow's milk; that the baby's milk should be taken from the top of the crock rather than the bottom; that the skimmed milk contains the curd and a larger part of the indigestible portions of the milk; that the elements necessary for the nutrition of the baby lie chiefly in the richer part of the milk or cream when properly diluted and rendered free and kept free from germ life; that modified cow's milk is the nearest substitute for mother's milk yet discovered; that the milk of the cow was intended for a more nearly perfect and rapidly growing animal and one of far greater physical development than the babe; that Pasteurization or sterilization does not add anything to the chemical properties of milk as a food, but only puts it in a condition to keep longer and prevents fermentation by destroying bacteria; that no amount of sterilization or Pasteurization will render a specimen of milk fit for use when it has begun to spoil or undergo putrefactive changes. Rather than add anything to the chemical composition of milk sterilization detracts from it.

It would be folly on my part to attempt an exhaustive essay on all the forms and phases of infantile diarrhœas. I have not the time, the disposition, or the ability to treat the subject in all of its aspects, but will confine myself to the most frequent forms of the trouble met with in every day practice, i. e., the infective diarrhœas caused by improper food and feeding, heat and dentition, mechanical diarrhœa if you choose, and ileo colitis. The rarer forms

*Read before the Buncombe County Medical Society, July 2d, 1900.

of diarrhœas, dependent on nervous influences, eliminative diarrhœas, amyloid degeneration, lenteric, tubercles of intestine, mesenteric lymph glands and nodes, flux and dysentery. Diarrhœa from drugs will scarcely be referred to.

Acute gastro-enteric infection will cover the majority of cases of infantile diarrhœa, which we are called upon to treat.

Etiology.—Heat, except in rare instances where the child has a poor constitution, is already debilitated, is born with a weak or an impaired digestion. Heat is directly the cause of a very small number of these cases. Digestion may be impaired in hot weather, excessive perspiration may call for an extra amount of fluids, too much food instead of water is given, and injury follows. A certain temperature is required for bacteria to become active and it is in this connection that heat becomes an important factor. The disease prevails to the extent to which other food than breast milk is given. Improper feeding, overfeeding and too frequent feeding, I believe to be responsible for nine-tenths of these troubles. Next comes bad sanitation.

Our attention has been called, by a member of our Society, to making the back yard a receptacle for slops, swill, and even in an emergency used for a water closet, as being a potent cause for typhoid fever. The same is true of these fermentative diarrhœas. Our soil is an impervious one and will appropriate a very limited amount of filth. Epidemic diarrhœa is a filth disease and milk is the vehicle of infection, just as mosquitoes are vehicles in malaria or rats in plague.

The process in summer diarrhœa in the beginning is one of putrefaction due to intestinal fermentation, dyspeptic diarrhœa if you choose, or cow's milk dyspepsia. Want of cleanliness in handling the cow and the milk is responsible for other cases. In this class is included the healthfulness of the cow and her food, the sanitary condition of the stables, etc.

No single species of micro-organisms is responsible for this disease. The ordinary saprophytic micro-organisms of the intestinal tract assume especial virulence. Other bacteria not ordinarily found in the intestinal tract may produce the disease. Fermentative products, toxic and non-toxic, figure in its production. *Bacillus coli* probably predominates. This is one of the troubles where clinical facts correspond in a measure with bacteriological research, while no specific bacteria has been discovered. The disease is dependent on the number of these organisms and the power of resistance of the patient, hence

we can explain why some children live and thrive and fatten on bacteria and their products while others will succumb to the presence of a smaller number. It seems to be a case of "the survival of the fittest."

Milk is one of the best culture media that we possess. The gastric juice, the bile, the intestinal juices will take care of and either appropriate or render sterile a greater or less number of these organisms, hence any process weakening or interfering with the secretion of these fluids, such as sickness from any cause, heat and its effects on the peripheral nerves, unnecessary articles of clothing, a lack of pure, fresh water in the system, will open up an inroad for these scavengers.

Pathology.—The pathology of the disease is often disappointing, superficial catarrhal inflammation being the extent of the lesion in most cases unless the putrefactive changes continue, the amount of toxic materials in the intestine increase and the process extends to the deeper structures and we have an ileo colitis, one or both. These diarrhœas are functional, at first dependent on abnormal digestive processes; in further course of the disease we have profound alterations taking place in the walls of the bowel ranging from catarrh to necrosis of the mucous membrane. The pathological conditions are not often commensurate with the severity of the symptoms. The structural changes found are more often post-mortem than ante-mortem. In true cases of cholera infantum the pathological changes are more marked.

Diagnosis.—The early diagnosis of these troubles is all important. Even before the movements from the bowel become more frequent than usual, the child is peevish and fretful, especially at night. If you take the trouble to record a temperature you will find it one or two degrees above normal; the child will often perspire and grow limp; heat rash will break out around the forehead and on the body; the appetite is impaired; there is a gradual loss of weight, tongue coated and red, oftentimes smooth and slick; the children become pale and lose spirits, they sleep badly, the flesh becomes soft and flabby, the skin wrinkled and oftentimes yellow; the movements become thin and watery, are much more frequent, the stools are foamy, brown, green or yellow, are always sour and offensive, and contain undigested food. These children are too often neglected in the beginning on the supposition that the child is teething, and it is nature's way of relieving them. I always look with suspicion on all these teething diarrhœas. The number of cases of diarrhœa in which teething is more than

a coincidence is few. The number of cases of illness in which teething is an etiological factor diminish yearly. The doctor who does not look further than the gums for the cause of any of the severer forms of diarrhœa is either lazy or ignorant, or is not willing to learn.

A correct diagnosis as to the location of these troubles is very important. We should study each case as being one of a class. Beginning with the stomach and ending with the rectum, we must study each type and treat it as a type. No field in medicine offers greater returns. To have a stereotyped treatment for all forms of diarrhœas is fatal alike to patient and physician. To be sure the alimentary tract is a unity, but early troubles beginning with the stomach and usually ending with colitis late in the fall and are cured long after frost, require entirely different treatment.

Keep a record of the number of stools; movements at night are of especial significance, the character, color, odor, whether they contain undigested particles of food, presence of blood, mucus and bile are of value and a help in locating the trouble.

Vomit depends on the nature and frequency with which food is taken. Normally there is no bile in the large intestine. Green stools emanate from the small intestine with a distinct reaction with nitric acid, showing the presence of bile in the passage, other stools containing mucus, cylindrical epithelium and round cells coming chiefly from the small intestine. When mucus is not thoroughly mixed with the fœces, when the fœces are wrapped up in it after evacuation, we conclude that the mucus comes from the colon and we have colitis. Blood of a bright red color comes from the lower end of the bowel. The darker the blood the higher up must the morbid process be looked for. Too much attention is paid to diarrhœas in general of the young and not enough to the various types. We all have a general knowledge of medicine, but the man who looks after his cases in detail, who can do something out of the ordinary, or who can develop skill along certain lines, is the man who succeeds. We must be able to diagnose the simple, the infectious, the choleraic, the inflammatory, the dysenteric, the lienteric, the reflex from cold and dentition. Duodenal catarrh can only be diagnosed when we have jaundice as a symptom. Tenesmus is only observed when the lower portion of the rectum is involved.

Prophylaxis.—Prophylaxis in these troubles opens up a wide subject. The nursery should be the largest and best ventilated room in the house. Extra cleanliness of

the domicile should be insisted upon, soiled diapers should be removed from the room and disinfected immediately, and the diapers should always be changed as soon as they are soiled; all unnecessary articles of clothing should be taken off the child; bathings should be frequent; the sanitary condition of the nursery, the house plumbing and drainage, the sanitary condition of the premises, grounds, streets and neighborhood are all important; more parks; more fresh air. Sea air is said to have a specific effect on these troubles; a change from the city to the country for two reasons is beneficial—the child gets purer air and, what is more important, fresher milk. The fresh air funds, the seaside homes, the modified milk laboratories have probably saved more lives than all drug treatment.

Maternal nursing should be encouraged by every possible means. Children should not be weaned during hot months if possible. Overfeeding and too frequent feedings are to be avoided. During hot weather children, like adults, require less food and more liquids. Each meal should be diminished one-third and water given freely. Prompt attention should be given to all derangements of the alimentary tract during hot weather. Do not temporize during the beginning of the attack. Fresh air out of doors is very essential. Boil every thing in the nursery except the baby.

Feeding.—Mother's milk is a constant composition within physiological limits and contains all the necessary elements of nutrition. It is free from micro-organisms under normal conditions. The milk has little opportunity for infection before reaching the child's stomach. The food is of an even temperature. Cold milk causes colic. Mother's milk may under certain conditions fail to come up to the requirement. Mothers who are sick or convalescing, or subject to strong emotions, who nurse too often, who have tuberculosis, or syphilis, who are pregnant, some who are menstruating, and all anæmic women secrete improper milk.

The wet nurse, while in some cases is indispensable, the objections encountered in getting one are so numerous that her presence in a household is regarded almost as a calamity. In search for a proper food all have agreed that no substitute has yet been discovered which will answer the purposes of human milk; no mammal whose milk production corresponds to human milk sufficiently to render direct substitution wise or safe. The problem, therefore, is modified cow's milk. Cow's milk contains the elements necessary for nutrition, but the compositions are different. It is necessary to know the differences in these composi-

tions and modify the cow's milk to suit each individual case. You must have a method expressing in exact terms the percentage of fat, sugar, proteids and salts. You cannot feed any two children alike. Each child and each stomach is a law unto itself. Milk varies, consequently we must have a working basis and that basis can only be correctly estimated in percentages. Study each case, ascertain which of the elements causes the disturbances and vary the food accordingly.

You cannot have a pet formula for feeding all cases. If you furnish one formula for every case and insist on making the baby adapt itself to the formula, you will only succeed in furnishing the baby with wings. You must adapt the food to the child's stomach. While we can in a large majority of cases by giving sufficient time, thought and care, modify any fresh, wholesome specimen of milk to suit the child's stomach, there are cases in which cow's milk fails and must be abandoned altogether. In these subjects I have gotten along for a time with condensed milk to which fresh cream has been added. The objection to condensed milk is too much cane sugar, the objection to cane sugar is theoretical, however, and does not always hold good in practice. In all feedings I prefer cane sugar to milk sugar unless we are sure we are using a good, fresh, stable quality of milk sugar. It must be remembered that milk sugar has only half the strength of cane sugar. In the ordinary feedings of children I think we often overlook the necessity of adding lime water or bicarbonate of soda to assure alkalinity.

The chemist tells us that starch is unnecessary and harmful for these infants; but they do digest and exist on a certain amount of starch. Barley water, rice water and occasionally oatmeal water are admissible and a help, when we are anxious to limit the number of feedings and to diminish the milk to the lowest possible quantity. We can often supply a feeding of plain, well cooked barley water. The physician who can feed these children successfully is one who can treat them successfully. Egg albumin is of value the white of an egg in boiled water and some salt. We can temporize often with meat juices, beef and mutton broth and chicken jelly properly diluted. Dr. Jacobi has given us a formula which is of value to sustain life: Brandy, 1 to 2 drachms, white of an egg, barley water five ounces, salt and sugar one drachm every 5 or ten minutes. If child is nursing, stop milk altogether for 12 hours or longer. If it is a bottle fed baby, stop milk for forty-eight hours or longer. Pep-

tonized milk can often be used. My experience, however, is that the process should be continued to complete digestion of the casein. In the beginning of one of these cases where cow's milk is used, stop it at once, do not temporize but relieve thirst by giving bland fluids frequently but in small quantities. Food prescriptions must be made with the same exactness as those for drugs, quantity and frequency being stated. We make most mistakes by giving too much at a time, feeding too often, too many articles at once and changing before we have given each article a fair trial and without ascertaining why it disagrees.

Treatment.—The first indication is to cleanse the stomach and alimentary tract. Theoretically and in hospital practice it is wise and proper to wash out the stomach, in private it has its drawbacks and difficulties. It should never be done except by a physician. Emetics should not be given to small and delicate children. There is one remedy which is not questioned by any one in the beginning, that is either a good sized or small and repeated doses of calomel to clear out the alimentary tract, doses of $\frac{1}{8}$ to $\frac{1}{4}$ Gr. according to age till 6 or 8 doses are taken. The lower bowels should be emptied by high flushing. One quart of decinormal salt solution in a fountain syringe two feet above the body and run into the bowel through a No. 10 flexible rubber catheter the full length of which has been inserted into the bowel. Salt solution is more readily absorbed, is cleansing. Many supposedly high flushings are low enemas owing to bending of the tube. Castor oil is of value in clearing out the intestinal tract. The Aromatic Syr. of Rhubarb is a remedy on which I place great reliance in these troubles. It, like a great many good remedies has gone into disuse for more fashionable drugs, but it is eliminative, it is soothing in small doses, has a sedative action and astringent properties. Opium, while invaluable, should be used with great care and caution to control frequent movements, reflex symptoms and pain. These little fellows will always feel grateful to you if you can remove all unnecessary clothing.

The so-called intestinal antiseptics, subgallate bismuth, betanaphthol-bismuth, salicin, arsenite copper, sulpho carbolate of zinc etc., etc, are all more or less irritating to the stomach and are of less value than the old standby Sub-nitrate of Bismuth, which should be given in large doses, one to four drachms a day.

I believe in an occasional small dose of calomel 1-20 to $\frac{1}{4}$ Gr. repeated all during

the treatment of these troubles. I am not able to tell you how it acts aside from its purgative action, whether it is converted into Bichloride of Mercury and acts as an intestinal antiseptic, which I very much doubt, but I do know that it is highly beneficial. Where there is a weak digestion and deficiency of stomach action, pepsin and hydrochloric acid are indicated. Of all the recent remedies offered for their antiseptic properties, salol is the best in my judgement. When we have mucous discharges or blood from the bowels repeated flushings are necessary, once or twice in twenty-four hours is all sufficient. Plain salt water serves a better purpose for me, is bland, unirritating and is the most easily absorbable of any fluids. I have derived no benefit from Boracic Acid, menthol or even Bichloride Mercury 1 to 20,000. The antipyretic treatment of these cases is very important. It is always necessary to control hyperpyrexia. Acetanilid and Phenacetin have no place in the treatment. Bathe frequently; start bath at 90 deg. gradually reduce to 70 deg. if necessary. Sponge frequently with tepid then cold water; give alcohol rubs. We all know the dangers of continued high temperature. Ice to the head is of value. Alcohol is invaluable and indispensable in severe cases of cholera infantum and is indicated in great prostration and in low temperatures in treatment of any and all of these cases. French brandy is given the preference because children like it and it is less likely to cause stomach disturbance. Rectal alimentation is not to be lost sight of. Bathe daily; mustard bath when we have cold extremities, cold perspiration and pallor of skin. Aromatic spts. ammon. in a little boiled water and camphor are valuable stimulants. Astringents, such as tannin and nitrate of silver are not only of no value but do harm.

DISCUSSION.

DR. PUREFOY.—I must confess that I feel very much at sea to-night. The doctor has practically disarmed me. He has presented a paper which is exceeding exhaustive, and in every sense a most excellent one, and it seems to me it is useless to discuss it or attempt to add anything further. I will only make one remark, and that is as to the administration of bismuth. I seldom give it except in those diarrheas where the discharges are thin and watery, and then I give it in very large doses. In true dysentery I do not give much bismuth, because I think it is practically useless. I congratulate the doctor and the Society on the paper.

DR. BURROUGHS.—There are not as many deaths from infantile diarrhea as there used to be, from the fact that we have learned more about how to feed than we used to know, and we have also learned more about intestinal antiseptics. The way to manage these little children is to give them a change of climate at once, and look out for the digestive apparatus. Find out what they have been feeding on, and correct matters as much as possible. Another thing is to keep the stomach empty for the first few days. That is a great point in these cases. If you keep feeding you are just adding fuel to the flames. If you can just understand that a child can live for 24 or 48, or even 72 hours, without food, and get everything swept out of the bowels, and then begin feeding with some pre-digested foods, you will cut a case short where otherwise it might last for weeks, and may end fatally. As regards cow's milk, I have come to regard it almost as solid food, not only for children but for grown people. If you get the cream and mix with a decoction from rolled oats you can get a food that will not have a curd, in which in fact there will be very little solid food in the feces of the child. In regard to temperature, I was much impressed by what the doctor said about cold tar products. I certainly do not favor giving them, but I control the temperature by ice water, baths and ice cold enemas, and am very careful to keep an ice bag to their little heads all the time when their temperature is above 100. You can watch the pulse and give a little brandy when necessary, with very minute doses of strychnine or nitro-glycerine as may be indicated. The fewer clothing they wear the better. They are always grateful to you if you take off all unnecessary clothing. I for one am opposed to giving medicines, beyond a few antiseptics, for the bowel, which should consist, as the doctor has said, of a little mercury, salol, etc.

DR. MILLENDER.—I certainly am interested in this subject. There are some things we always have with us. If the privilege were given me of inventing or discovering some specific for some disease of my own choosing, I suppose the first thing I would think of would be tuberculosis, and the next thing would certainly be summer diarrhea of children, the great scourge of childhood. When I am called to see a child with diarrhea, I always feel anxious. If the mother gives me a history of very high temperature in the beginning, with bloody stools, I consider the prognosis as grave. If a case of appendicitis comes under our observation we feel we can remove the appendix and cure the patient perhaps. If a child has

diphtheria we feel we can give it antitoxin, but no matter what remedies you employ now and then a little fellow dies of gastroenteritis or enterocolitis. All the remedies we have are disappointing. I was very much struck with the doctor's remarks with reference to prophylaxis, and what he says on this subject makes up the most important part of treatment. I am satisfied the treatment of this disease is not a matter of medicine. Preparations of opium certainly have their place, and calomel has its place, and subnitrate of bismuth is always useful, but even that is not a specific. It seems to me there are two things which predominate in its causation, and one is summer heat. I believe that summer heat makes it possible for every child, whether bottle fed or fed by its mother, to have this very same thing we have been talking about, and for it to end fatally. We call it summer diarrhea instinctively because it is associated with summer heat. The other pathological factor is, of course, the germ factor. I do not know where they come from, whether from without or within, but we know that in the summer time these germs find a suitable soil for propagation in the alimentary canal. With these two factors to contend with it seems to me that almost all medicine is more than useless. I believe I have tried all the remedies that have been suggested, as I have no doubt all the doctors here have, because we all come in contact with it in the summer, and I am more and more strongly impressed every year with the absolute and utter inability or uselessness of all medicinal remedies, except perhaps those I have mentioned. I do not believe antiseptics do one particle of good. How is it possible to get enough calomel or salol (which in large quantities we know does a great deal of damage in upsetting the kidneys), or any other remedy into the bowels to kill the germs which we know to be the main trouble in the disease. These little fellows suffer a great deal. They have frequent movements of the bowel, and it does not take many movements to prostrate them. They look like dead children, as the doctor said. That is not because they have diarrhea. Look at the cases we see of typhoid fever. It is the same kind of effect produced by the germs we find in Asiatic cholera. It is due to the germs. I have learned to rely more and more on hydrotherapy in these cases. I believe we can change the climate to a certain extent by cold water graduated by the thermometer from 90 to 70, as the doctor says. We have very little fever in these cases, except in the beginning, unless it is going to terminate fatally, and then the temperature runs up

high. My treatment is to irrigate the bowels and wash out the germs, and also use lavage to wash out the stomach, but ordinarily a child does not suffer with the stomach, but with the lower bowels, the lesions being in the upper part of the rectum, the sigmoid flexure, the cæcal region, the very places we can reach by flushing, and if the flushing is properly carried out, and if in addition the bath is given, as it ought to be to stimulate the child's nervous system, the great majority will get well. I believe the great majority of cases that die are killed by medicine.

DR. JORDAN.—I enjoyed the doctor's paper thoroughly and completely. Dr. Millender said he was in doubt as to how calomel acted in these cases. I have used it and always use it in almost every case of summer diarrhea, and whether it acts as a secretory stimulant or a germicide I do not know, but you will see those cases of frequent movement, green in color, sometimes mucus, sometimes not, but after repeated small doses of calomel, with the addition of a little ipecac and soda especially, those actions will gradually subside, and gradually come back to the normal condition and color. I am heartily in favor of the stimulant Dr. Fletcher advocated, viz., brandy. You will find some stimulant necessary in nearly every case, and where it is brandy is the best that can be given. As for the trouble in the lower bowels, repeated flushings always accomplish more than anything else, and you will find that common cooking soda added, will have a tendency to bring more comfort and soothe the bowels, and if the stools have a bloody inclination I have frequently used a combination of euophen, tr. opii deod. and mucil-agacacia enema, following the flushing with soda solution occasionally, and have seen that condition change within two days from the first flushing, and it quiets the bowels almost immediately. Of late I have tried in three different cases Parke-Davis' Chloretone for restlessness and nausea, and have gotten good results so far. In doses of one-half grain, mixed with sugar of milk, it acts like a charm.

DR. PAQUIN.—This is a complete paper. It is an ideal one. It opens to the mind a vast avenue of thought on subjects antedating the birth of the baby. There is today a movement and a feeling among a good many people in and out of the profession to the end that a child should always be well born, physically, mentally and morally. There is ground nowadays to expect that a prospective father or mother should be at least in good health before entering into the contract of marriage. A

great deal of the suffering of the child which is of the class mentioned by Dr. Fletcher in his able essay, has for its basis physical defects which would not exist if the child had been well born. Every child has a right to be brought here by parents whose physical conditions are as near perfect as possible. There is a tendency among mothers not to nurse the child, but to leave them to the negro or white stranger nurse. Of course it is perfectly proper, when necessary, that the milk of these or the cow should be used. But there is a vast difference in the milk of the cow and that of a human, and the great difficulty, aside from the microbic factors that exist, is the extra amount of casein. That is the principle that curdles, because the active digestive elements of the child are not able to cope with it. If it were possible to perfect and humanize cow's milk, you would arrive approximately at the right kind of foreign milk for babies, but this has been largely a failure. When it comes to the actual results you find that before you can extract a sufficient amount of casein to reduce cow's milk to human milk too much has been abstracted and the vital principles, I might say, of fresh warm milk, so essential to child nourishment, are more or less ruined. I do not know of any process so far by which one can truly humanize cow's milk, but there are cases where such milk, sterilized, must be utilized. The chief difficulty is, as I have said, the casein. It is forced into the lower bowels half digested, and, as curd, forms an irritant. If, in that condition, it meets microbic bodies, capable of living on this material, you have not only the curd but poisonous products formed. If any process could be found by which this casein could be eliminated to the degree of its existence in human milk, then we would have in reality a substitute for that milk. It seems to me that on the point of infant mortality it is the duty of the medical profession to give a note of warning among our people that the tendency of the age that a child be left to the stranger's care, away from its mother, is often a criminal thing. There are many women who have children to-day who do not nurse them because of a matter of caprice, or because they have social duties devolving upon them which take them away from home. Their only concern about the birth of a child is little more than the ethics of its making. They feed a child without concern as to its digestive organs. But for its purely professional side I would like to see this paper amplified on ethical grounds, published and put in every mother's household. I would like to see it emphasized that the mother

has a duty that society and civilization have denied the child, and that every child is entitled to be well born.

DR. WATSON.—There is only one point I would like to speak about. I have found nitrate of silver valuable in those cases where the rectum is involved. After flushing out the bowels and after you have exhausted your opium, if you will use a solution of nitrate of silver you will often relieve the pain. I do not see that it can possible do any harm used in proper form, say one grain to three or four ounces, and I have used it a little stronger. The tenesmus immediately disappears, and in many cases does not return.

DR. SAWYER.—This discussion and paper, especially the paper, has interested me greatly. It has covered the field. To confine myself more especially to treatment, the first thing to do is to look after the child, its food, clothing and bath, and regulate them all. If the child is suffering a great deal with tenesmus I order an injection of soda, then a powder containing calomel, ipecac, soda and pancreatin, that is in ordinary cases of summer diarrhea. This is followed by the proper treatment for individual cases. I find it very good treatment, especially in the children suffering from painful evacuations to inject a tablespoonful of listerine to a pint of warm water up the rectum two or three times a day. This gives relief. It is also good to give 15 to 45 drops of listerine, taken internally. Sometimes it is necessary to add a little paregoric; sometimes sub-nitrate or sub-gallate of bismuth, and other things as the occasion may arise, but you will find, if you use this listerine, you will get surprisingly good results. You can use it in a strength not to kill the germs but sufficiently strong to inhibit their activity and have them swept out by the other medicines used. I do not believe in using such medicine in cases of children, but sometimes it is essential, and when it is I do not hesitate to give it. I have been very fortunate, and do not think I have ever lost a case with diarrhea.

DR. BURROUGHS.—I would like to ask Dr. Sawyer if he thinks that listerine gets beyond the stomach.

DR. SAWYER.—I certainly think it does. In what form I do not know, but it gets in its good work some how, as experience proves.

DR. GLENN.—I would like to speak one word in regard to the supposed action of calomel. I do not believe that the good derived is due to the antiseptic effect alone. I believe it to be a tonic to the general system. I think it is as much an antidote to

the action of the poison in the tissues. I do not give it in large enough doses to really antisepticise the alimentary canal as thoroughly as it often appears. I believe it has a tonic and aliterative effectiveness. Of course, it has an action on the liver and I believe it does good in that way, by causing a freer flow of bile, which is an antiseptic and digestant in the bowels. It emulsifies the fats and prevents putrefaction of food. Calomel should not be used if great asthenia complicates the disease.

DR. REYNOLDS.—It has often been said, and I have heard physicians of note who treated infants remark that they would rather treat an infant than an adult any time, for the reason that you can examine your little patient and it cannot lie to you, and you can find out its troubles, and for that reason it seems to me the students at large, before coming into general practice, neglect this very important question, and one that should be thought of, considered and gone into, as Dr. Fletcher has tonight, by us all more frequently than we have done. As to the prophylaxis, in my opinion it is the mainstay in the management and treatment of these cases of infantile troubles. The little children as a rule are overfed, and that have failed to assimilate this food and acts as a foreign matter, and thereby we produce our trouble. If we will give the child in summer less milk and more water we will have less trouble with this disease. In the general routine of treatment of course we have all tried almost everything that has been spoken of this evening, but there is one suggestion I would like to make. I read in a medical journal the other day that a high enema was an injury to the child, in that it irritated the bowels, and that it did not do any good. I must say I was partial to the high enema, but his reason for it was that it could not reach beyond the sigmoid, and with the low enema, you can reach the bowels just as well as with the high enema, and avoid your irritation. Brandy is of paramount importance in the treatment of infantile digestive disorders, especially in diarrhoea. It acts as a stimulant and a tonic and gives general tone to the bowels. I do believe in the enema, first, last and all the time, and cold sponges and ice to the bowels.

DR. FLETCHER.—I can only thank the gentlemen for the discussion they have given my paper. In regard to Dr. Mil-lender's medication, I would not say that medication is valueless, but I will insist that the disease is one of prevention rather than cure. If we can keep the child on proper food he will not get into this condition. In regard to Dr. Panquin's remark

as to the absence of the secretion from the pancreas up to three months. I recommend rice water and barley water which of course we know contains starch, but the salivary glands will digest a certain amount of starch, and Dr. Jacobi has taught for years that a certain amount of starch was admissible. As to Dr. Watson's remarks, I stated in my paper that I did not include dysentery and flux, as I could not treat it in an article of this kind, but nitrate of silver is admissible where you can see and know where you are putting it. I cannot possibly see how listerine can get beyond the stomach. Certainly when it came in contact with the gastric juices it would be changed. I do not know who wrote the article Dr. Reynolds referred to as to high flushing, but it has been demonstrated over and over that you can flush out the colon. I have seen in adults a short time after he has been injected with half a gallon of water that he will vomit it. It has gone all the way up.

Protonuclein as a Remedy in Tuberculosis.

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We desire to submit for the consideration of the many readers of *The Charlotte Medical Journal* a short report on tuberculosis and its treatment. During a practice of twelve years we have made this disease and its treatment a special study. It is a well established fact that medical men have less success in curing this disease than any other they are called upon to treat. This is not because the diagnosis is so difficult, for it is not. With the history of the case, the objective and subjective symptoms, and the use of the microscope, it is no difficult matter to diagnose tuberculosis. The trouble lies with the treatment. To be successful we must first know the exact nature of the changes that take place in the organism. That is, how far these changes differ in the lungs, blood, sputum, and urine when compared with those in health. And in the second place, we must select a remedy that will stop these pathological changes and restore the system to its normal condition. It is impossible to treat a case of tubercular trouble successfully without using the microscope, to say nothing of its value in making the diagnosis. The blood, sputum and urine should be analyzed once every one or two weeks throughout the period of treatment. By so doing, knowledge can be gained that will

indicate the progress made by the disease and how far the remedy is able to counteract the toxic influence of the bacilli and nourish the impoverished blood. It is our candid opinion that these pathological examinations must be made from time to time if this terrible disease would be brought to a successful termination. In these examinations the condition of the blood cells is seen, the per cent. of hæmoglobin recognized and the number of tubercular bacilli computed.

It is an established fact that these bacilli enter the lung tissue from the blood current and produce irritation of the connective tissue elements; as they increase in number the area in which they are located becomes strangulated and there is a marked proliferation of round cells. These resemble epithelial cells because they contain large quantities of protoplasm. When these areas of irritation and strangulation are produced the leucocytes mostly with karyotintic nuclei rush forward from the surrounding tissue vessels and at once resist the pathological attack. They counteract the toxin or poison produced by the bacilli and protect the surrounding tissues by their phagocytic action. They have the power to elongate and change their shape at will so they can pass in and out of veins, arterioles and capillaries, or they can burst asunder their coats and become food for the surrounding tissues, and lastly they may form one or more new leucocytes. Their power to multiply and form new ones is a very important one, for all scientific observers now agree that any condition or any medical treatment that will favor the development of new leucocytes will aid in curing all diseases caused by specific germs or micro-organism.

Because they absorb proteids and waste matter, and will at once wage war against the bacilli and destroy their poisonous toxins, therefore, the reader can understand at once how important it is in the treatment of phthisis to select such remedies that will increase the number of leucocytes and to often examine the blood so he will be in a position to know just what improvement is being made.

The analysis of the urine is also necessary to determine the amount of protective substances that are passing out through this channel. The sputum should also be examined to determine whether the bacilli are on the increase or decrease.

In making examination of the blood from time to time a differential count of the different forms of leucocytes and blood cells should be made.

From the foregoing statements it will be seen that to treat tubercular troubles, especially phthisis pulmonalis, satisfactorily, a

remedy should be selected that will cause a rapid growth of leucocytes, that they may furnish pabulum for cell life and increase in sufficient numbers to destroy the bacilli and hold them in check. It has been our aim for the last several years to find a remedy that would be best suited to meet these indications. Strychnia nitrate was prescribed with good results in some cases, but was seldom curative. Then followed tubercular antitoxine and antitubercular serum. These were steps in the right direction. We have used the latter in a great many cases with excellent results, but they are unstable, costly and hard to administer. Many patients absolutely object to their use because such remedies must be inserted with the hypodermic needle. We now have a remedy free from these objections and one that meets the indications most beautifully. This remedy is Protonuclein; it is especially adapted in cases of phthisis, causing a rapid growth of leucocytes and at the same time preventing retrograde metamorphosis of tissue cells and sustaining the vital functions.

If the physician will press this remedy in proportion to the scarcity of leucocytes in the blood, and see that his patient has suitable clothing, good, nutritious food and pure air, he will be surprised to see how many consumptives he will cure. These hygienic conditions and surroundings are absolutely essential when prescribing any kind of treatment for this disease and should be carefully carried out while prescribing Protonuclein.

If the air of the mountain regions invigorates the patient, send him there; if the salt air of the seashore renews his vigor and makes his blood tingle in his finger-tips, by all means send him there.

Never keep tubercular patients in the hospital, no matter what treatment they are taking, but send them where they can get pure air that contains plenty of oxygen. Pardon this little digression, and we will report the clinical history of a few of the worst cases we have treated with Protonuclein.

Mrs. M., age 32, farmer's wife and the mother of three children; phthisis in the family for several generations; sick for the last six months; bad cough, with profuse expectoration; poor appetite; normal weight 145 pounds, now weighs 105 pounds. Has taken teraline and whiskey for four months; condition grows gradually worse. Analysis of blood at the beginning of treatment revealed hæmoglobin 46 per cent., poor in quality; red blood cells 2,050,000; white cells 9,600; a number of fragmentary red cells, poor in albumen; nucleated red

cells absent; leucocytes, polymorphonuclear 79 per cent.; lymphocytes, large and small, both 10 per cent.; myelocytes, $1\frac{1}{4}$ per cent.; eosinophiles none. Examination of sputum revealed pus cells and tubercular bacilli numerous. Examination of urine: color murky; reaction slightly acid; sp. gr. 1.016; albumen considerable; sugar none. When examined with the microscope it revealed pus cells and epithelial cells; tubercle bacillus with bacteria. The patient was placed upon three Protonuclein tablets every three hours. At the end of two weeks analysis of the blood and sputum was made, which revealed a decided increase in leucocytes and a small gain of red blood cells, with less bacilli and pus cells in urine.

At the end of ten weeks the cough and expectoration had ceased, appetite normal, color fresh, and patient had gained 20 lbs in weight. Examination of blood showed a gain over first examination, red cells 9 per cent.; leucocytes, $18\frac{3}{4}$ per cent.; hemoglobin, $6\frac{1}{2}$ per cent. Examination of sputum, no pus cells; no tubercle bacillus. Examination of urine showed the following: Color, straw; reaction, acid; sp. gr., 1.020; no albumen; no sugar; no casts; no bacteria; no bacilli, and few uric acid crystals.

Five cases of phthisis, in the second stage, were selected especially to test Protonuclein. Four of these patients were greatly reduced in flesh, had severe cough and profuse expectoration. All had hectic flushes in the afternoon, with night sweats. Pulse rate was from 105 to 130 in the afternoon, according to severity of disease and condition of patients. Temperature in the mildest case 99 deg. F., and 103 deg. F. in the worst. Three of these cases were females between 22 and 45 years of age; all married. The remaining two of this series were men, both single, aged 17 and 36 years respectively. There was hereditary taint in each family, but quite distant in the younger man's case. All these cases had tubercular deposits, and three had cavities, two in left upper lobe and one in right upper lobe. All of these patients revealed when blood was examined absolute proof of the disease: Hemoglobin, $42\frac{1}{2}$ per cent; red cells, 2,520,000; white cells, 8,900; no nucleated red cells; many broken fragments of red cells; polymorphonuclear leucocytes, 83 per cent.

The above is an average taken from the five patients. The sputum in each case contained tubercle bacillus and pus cells. The urine contained albumen, epithelial cells and pus cells, except in the case of the youngest female, in which there was no albumen. The urine of each revealed bacteria and

tubercle bacillus in limited numbers. All of these cases had been treated for varying periods with the usual remedies; cod liver oil, glycerine and creosote, terraline, etc. These patients were placed upon two Protonuclein tablets (three grains) four times daily, at 6, 12, 3 and 6 o'clock. They were ordered to drink chalybeate water and take plenty of out-door exercise as they improved. Meals were ordered at 7:30, 1:30 and 7:30 o'clock. This was June, 1898. While some did not improve as fast as others, examinations of blood and sputum showed a gradual return to health. The leucocytes with nuclei became active and multiplied rapidly, while the cough, evening rise in temperature and night sweats gradually subsided.

By the first of September the young man was dismissed after being cautioned to live an out-door life in a climate best suited to his condition and to continue the use of Protonuclein at intervals of several weeks for some months. The first of October the four remaining patients were dismissed with similar instructions and went to their respective homes.

I have kept in touch with these patients, and up to this writing there has been no return of the trouble, except with Mrs. W., who went to Washington, D. C., and remained with her parents until after the holidays, then returned to her home in Washington State. She contracted a severe cold on the journey, and after arriving at home had la grippe, which left her with a bad cough. The tubercular trouble again developed, from which she died May the 2d, 1899.

This report would be of much more interest had I reported each case separately, giving details of each, but space is not allowed. These are only a few of the many cases in which I have prescribed Protonuclein with most excellent success and I am fully convinced that it is the remedy par excellence for tubercular troubles; not only that form wherein the lungs are involved, but all others.

We have evidence before us that causes us to assert that we believe that patients in the last stages of the disease will live longer and suffer less upon this remedy (other things being equal) than any other known to the profession to-day. In our practice we have only used the Protonuclein made by The Alkaloidal Co. and Reed & Carnrick. The tablets prescribed to patients reported in this paper were the product of the latter. In treating phthisis pulmonalis with this drug the dose should be varied according to conditions. It frequently occurs that when we are pushing this drug

its physiological effects are produced; when this point is reached the dose should be reduced about half or omitted for a short time, and then pushed to the same point again until improvement is no longer a question. In our use of Protonuclein, extending over several years, we have discovered that to get the best results from its administration it should be (either powder or tablet) taken into the mouth and thoroughly dissolved by the saliva before swallowing, also that the best results are secured when taken upon an empty stomach, although it is more likely to produce headache and flushings of the face if large doses are being prescribed. The dose should be preceded by a half glass of hot water, as hot as the patient can possibly take it. If it is omitted before it should be taken with the drug. In treating consumptives whose bowels are constipated or liver is torpid, it is good treatment to clear out the intestinal tract and stir the liver to action before beginning the administration of Protonuclein. If the patient is very much reduced in strength rash purgatives should be avoided. An alkaline purgative can be administered and followed with Chionia in moderate doses until the portal circulation and liver are in perfect order.

Significance of the Stool in Infantile Diarrheas.*

By Wm. Edgar Darnall, A. B., M. D., Atlantic City, N. J., Visiting Physician to the Atlantic City Hospital; Fellow of the American Academy of Medicine; Member of the American Medical Association; and Vice President of the Academy of Medicine of Atlantic City.

The most important feature in treating the summer complaints of infancy, is a systematic and careful examination of the napkins day by day. The clinical symptoms furnish a general idea, but the stool is an actual index of the conditions present. Appearance, consistency, and number of movements per day are to be considered. The verbal descriptions of an anxious mother are not to be depended upon. She will say yes to almost any direct question. Her lack of scientific training precludes her knowing anything about the details of consistency, color, particles of fat or casein, mucus, pus, necrosed epithelium, blood &c.

Usually there is a history of the baby becoming cross, peevish, loses appetite and

vivacity, and vomits its food. The stools increase in frequency, are thinner in consistency, and unnatural in appearance. Here is a condition of indigestion. The well meaning mother, every time it cries, gives it more food. The difficulty is thus increased. The baby becomes worse. Movements become as thin as water, yellowish or muddy brown, offensive, perhaps accompanied with much flatus. They soon become colorless and watery. Weight is lost rapidly. The life of the little one leaks away literally through its bowels, unless this leaking is promptly controlled.

The dirty leaden colored stool is enough to tell the tale of infected masses of imperfectly digested food. Profound impression is made upon the nervous centers by the absorption of toxins from the bowels. The little patient wilts like a plucked flower, unless promptly cared for.

Most common perhaps is that terror of mothers, the green stool. Acid in reaction, accompanied with colic, indicates too great a percentage of carbohydrates in the food. The passage resembles masses of finely chopped spinach or parsely intermingled with proteids of undigested casein or fat. Most to be dreaded is the watery movement, with here and there a small speck or mass of light pea green matter. It is little less dangerous than if it were so much arsenic. It is often seen in the latter stages of marasmus, when the natural secretions are so altered as to be unable to combat it.

THE MUCOUS STOOL.—Mucus is always present in the feces. It is not visible except when in abnormal quantities. When present therefore, in indicates an inflammatory condition of some portion of the alimentary tract. If in the small intestine high up, it will probably be bile stained. If in the colon or rectum it will be, as a rule, composed of white jelly like masses of mucus; and attended with pain and tenesmus similiar to the dysentery of adults. If it has continued for any length of time, shreds of necrosed epithelium may be found sometimes coming away in perfect strings.

Another not uncommon condition is seen in the whitish or grayish white stools of putty like consistency. The appearance is often very much like cigar ashes. Fischer states, these stools are composed largely of undigested fat. At any rate there seems a total inactivity of the liver function, since often no trace of bile is found in the excretion.

The constipated stool may be mentioned in passing. They are usually dry, pasty

*Abstract of a paper read before the American Medical Association.

and lumpy, the result mainly of an insufficient quantity of fat in the food.

Hygiene is too large a subject to be discussed here in detail, except to say in passing that it is of vital importance; and too much care cannot be given to bottles, nipples, napkins, bathing and dress.

Excluding constitutional diatheses, the treatment of bowel conditions of infancy may be summed up in three words, (1st.) Elimination, (2nd.) Disinfection, (3d.) Feeding; using always as few drugs as possible.

Let it be remembered that the starting point of all these troubles is indigestion with retention and decomposition of food in the alimentary tract, which causes auto-intoxication by the absorption of toxins from the bowels. The first step therefore is to stop all food for a day or two, using barley water or plain sterile water for its thirst. Then rid the bowels of all offending matter by drachm doses of equal parts of Castor Oil and Aromatic Syrup of Rhubarb. Antiseptic action may then be obtained by tenths of Calomel and quarter grain doses of Salol, which may be combined with Bismuth for its sedative effect. If the stools are serous, grain doses of Dover's powder after each loose movement should be used. For a condition of great relaxation, stimulation with small doses of brandy may be employed, or Morphine gr. 1-100 and Atropine 1-500 to 1-800. In all conditions of abdominal pain, hot applications over the abdomen are of service. Should mucus be present, large doses of bismuth should be given and the addition of Aromatic powder, or a little oil of Anise by their carminative action help to expel the flatus. Simple medication is all that is necessary for most children. Some children however seem to resist all efforts and tax the attendant to the utmost for expedients. In such cases a daily high irrigation of normal salt solution or warm water may be employed. It is of especial service in cleaning out mucus from the bowel or any focus of infection, besides being soothing and comforting to the little sufferer.

The hardest question to settle perhaps, in the management of a sick infant, is the adjustment of a suitable diet. None of the Proprietary foods are quite satisfactory or efficient without the addition of fresh cows milk, except for a short time. If they are to be used, only experience and good judgement in their selection can determine which food will suit the individual case. Often one food after another may have to be tried, until the whole gamut is run and the right one is found. The most satisfac-

tory as well as the most scientific way of meeting the difficulty is, beyond a doubt in the modification of fresh cows milk. It may be pasteurized to decrease the risk of infection. The sick baby should be started on a low percentage of proteids and fats, which may be gradually increased if the digestion can stand it. One-half to one per cent. of the proteids may be ordered for a child from six months to one year of age. In some cases even with such a low percentage, it is necessary to peptonize the milk for the delicate stomach of the weakling. The proteids should be gradually increased by easy stages, and the movements jealously watched for the presence of curds or masses of fat, and on their first appearance the percentages should be again decreased.

While every one cannot, or account of expense, afford to have the milk scientifically adjusted at the milk laboratories, yet any progressive physician, who will take the trouble, can work out his own percentages and so instruct the mother that she may approximate them in the home modification of the milk. This becomes especially easy by means of the Estraus Materna, introduced by Dr. Holt, which is a simple and convenient device within the reach of every one. It is an octagonal glass receptacle, holding sixteen ounces, and so graduated on its various sides, that if the markings are followed six different sets of percentages of modification may be produced and that suited to the case selected.

The treatment of infants requires infinite care as to details and patience, while the closest scrutiny of its small body in all of its physical appearances, and an observation of its motions, facial expression, and even its cry is requisite. These are its only modes of expressing its sensations, and a correct interpretation of them often sheds light on a proper understanding of its condition.

Bilious Fever.*

By F. B. Cullens, M.D., Member State Medical Association, Member Board Censors Dale County Medical Society, Etc., Ozark, Ala.

Answering the demands of your last meeting, whereat you did me the honor of soliciting a paper on the above vague and uncertain subject, I have the pleasure to submit the following: Not, indeed, in the vain hope of presenting anything new on

*Read before the Dale County Medical Society.

this much hackneyed question, but rather simply that we may get it before this body for discussion. The term Bilious Fever is vague and indefinite, from the fact that it expresses but little, if any, of the pathology of this condition, illustrating at once the faulty nomenclature with which present day medicine is encumbered. Like that other pathological giant and dreaded monster in medicine, typhoid fever, it has taken its name from one, if not the most prominent, feature of its existence—regurgitation of bile through the pyloric (pathology) valve and vomiting of the same. The pathology of bilious fever is by no means confined to a mere functional derangement of the hepatic organ, but rather to the whole of the digestive and alimentary tract. There is congestion, more or less, of the whole *prima-vie*.

There is a swollen turgescence state of the peptic and intestinal glands, both solitary and agminate, with partial occlusion of their ducts, thereby limiting the supply of the normal secretions so essential to the processes of digestion and assimilation. These products are true enzymes, and their presence in unmodified form, and sufficient quantity, is necessary to support and maintain that even adjustment of nature in those multiform processes of tissue metamorphosis, comprehended under the general term of Metabolisms.

Without these juices, with their acids and proteids, the aliments remain in the stomach and intestinal tube, and ferment and putrefy, having then all the irritating and disease-producing power that a foreign body has, which, indeed, they are to all intents and purposes, being, as they are, incapable of proper handling by the embarrassed machinery. The etiology (etiology) of such an attack may be referred to some error, or rather many errors of diet and habit. Climate, too, has its influence, peoples of low tropical zones being more subject to attacks than the colder and higher regions. This may itself be due to the fact that in the high and cold parts of the country there is more stir and energy than in the hot, thereby affording a more active impress upon the whole organism so conducive to health.

Another thing, too, I have observed about these conditions, and that is, that what is known as temperament I believe has its influence on this disease. Those people of a dark "bilious" temperament being more subject to the attacks and suffering more than the light blue-eyed sanguine ones. Why this is so I am unable to conjecture. Or whether, then, it is an effect rather than a cause I am unable to say. As to the symptoms, they are varied and many,

some of which, however, are common to a great many other troubles. There is always some fever, sometimes very high, too. This fever has something of a diurnal feature, ranging higher somewhat in the evening and remitting by the return of morning; but there is lacking that even curve of temperature characteristic of the typhoid state. The tongue is large and swollen, showing the teeth indentations on its surface; it is generally pale-looking, with a slimy whitish coating. There is always impairment of the appetite, and often there is complete anorexia, with a loss of the naturalness of taste of things—not even water tasting natural to the sufferer. There is great lassitude and want of energy; indeed, the disease is often ushered in by a prodrome of distinct lassitude before any of the more marked symptoms appear. There is always more or less gastric intolerance, with retching and vomiting of "bilious matter." Headache (frontal) with congested eyes, may, too, be accounted as an unvarying symptom of this disease. The urine is unusually dark and thick acid reaction to a degree of irritation sometimes to the urethral track. The bowels are at times swollen and tense, with considerable tympany; but I have never yet remarked any special tenderness anywhere, not even over the liver.

The nervous symptoms are what one might reasonably expect to find them, in such a state of auto-intoxication. The circulatory medium taking up through the regular channels these putrefactive toxins lying in the alimentary track, reacting on the trophic centers in the spinal cord, producing a state of toxemia, and we have the classic picture of mental dullness with physical prostration, lassitude, etc. There is never loss of consciousness, though, unless something else complicates.

PROGNOSIS.—The prognosis is always of good in this disease. Given a constitution reasonable strength and vigor, and there is hardly any excuse for a death.

DIAGNOSIS.—The diagnosis and differential diagnosis rests upon a careful study of the rational symptoms and physical signs. It is hardly possible to err if the observer is allowed time enough to group the symptoms in their proper sequence before being pushed too urgently for an opinion. The only fever it is possible to confuse this with is typhoid, and here, if sufficient time has elapsed, the difference is marked. There is absence of the temperature curve, absence of the rose-colored spots, absence of tenderness and gurgling in the right iliac. Again, in typhoid the nervous symptoms tend to sink the victim in profound stupor, (hence the name). In this fever the symp-

toms are rather fulminating if they are much in evidence at all. There is never in this fever loss of coherency in speech and the mind, if not clear, is at least in balance.

Last, the microscope will clear up any possible confusion, as well as the Widal Test reaction.

TREATMENT.—The treatment of this condition is a thing that while there may be a wide divergence in the methods pursued, yet all must aim at the same result. There are *two* essential things to be done in the successful handling of this fever which I may say form the basic ideas upon which the superstructure of therapeutic effort is built: They are comprehended in the terms elimination and intestinal disinfection. All other things are of minor consideration compared to these. In the treatment of this fever there is no lack of material in the armamentarium of the physician of to-day.

I may be excused if I ask your indulgence in outlining what I consider would be an ideal regime of medical effort in this disease. Since you have borne with me patiently this far, let me ask you to patiently consider a little further. Given such a patient I would order a warm bath and send him or her to bed. Cut off at once all diet, save milk alone, either sweet or *fresh* buttermilk. I would administer minute doses frequently given, a mixture of the mild chlor. mercury and soda, say till 6 grs. was given the first day, in the morning following, a saline aperient, either salts or seidlitz powder. This procedure I would continue till I obtained large bilious stools, following which I would exhibit spts. tupt. in three or four-drop doses with salol suspended in fresh mucil acacia agreeably flavored every four hours till the bowels were rendered thoroughly inodorous, and the kidneys active. At the same time allow the patient large and copious draughts of lemonade. For the fever per se, I would put the patient in warm bath, and if the range was excessively high, give internally in connection with the bath 5 grs. acetanilid. If there was great prostration, or nervous inertia I would administer subcutaneously 1-30 strychn. and 1-8 morph. and allow a little whiskey or brandy mint occasionally. If I suspected the presence of malaria, would give large doses of quinine till I got physiological effect. When convalescence was established put patient on the nitromur. acid with tincture nux vomica and pepsin after eating.

There is one other feature in the treatment of this condition to which I desire to call particular attention, and that is a consideration of the function of the sudoriferous glands in the skin, as a very powerful and

substantial means of hastening the elimination of the effete poisons in the system, as well as stimulating the radiation of superfluous heat. I do not believe that physicians as a rule pay enough attention to this very important function. There are many instances in the domain of pathology where a little care and detail on these lines will effect great good. Physiology teaches us that there are about ten thousand of these little glands opening on the surface to the square inch, I believe it is. In this condition where the "humors" of the system are poisoned as it were by the absorption of the noxious products lying in the alimentary tract, as pointed out, the skin, when properly stimulated, can be depended upon to throw off an abundance of them.

There are a good many methods by which this may be accomplished, viz: the hot pack, the tepid bath, the vapor bath, etc., etc.; but the method most effective with the least trouble, I think, is the hypodermatic injection of Pilocarpine 1-10 gr. and wrapping the patient up in blankets following its exhibition. To guard against the possible depression, especially in the aged, it is well enough to give the patient any of the nervo-cardiac stimulants, such as alcohol in some form, strychnine, ammonia, caffeine, etc.

Now, gentlemen, in outlining this treatment I don't want to appear dogmatic. There are many agencies in the store-house of nature, which I haven't mentioned, whose help might be invoked in the handling of this trouble with equal, if not better efficiency. I thank you for your considerate attention.

Alcohol in Diseases of Children.*

By I. A. McSwain, M.D., Paris, Tenn.

To stem the current of popular opinion is not always an easy task, and is frequently attended with disaster. But to write a paper to be read before a body of intelligent medical men, the subject matter of which is simply a restatement of well-understood, and uniformly conceded facts, is to say the least, uninspiring to the writer, and stale to the audience.

But, on the other hand, to undertake a departure from the ordinary and to dare to oppose current thought or to call in question the statements of what are known as "Authorities" upon a given subject is usually the occasion of arousing antagonism

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and perhaps of calling down the most pronounced denunciation, and of giving to one who so dares a *non de plume*, or epithet expressive of disapproval.

But in spite of the universal tendency in the human mind to oppose innovations, yet all history abundantly proves that the world is largely indebted to that class of men who stand up in the face of the multitude and dare maintain a truth for its own sake. Many theories have been universally accepted and practiced that have proven false. There seems, indeed, a proneness in human nature to more readily imbibe error than truth. Falsehood is ubiquitous, self-assertive and ever-seeking recognition, while truth is modest and retiring, and to be obtained must be sought after. So that a just estimate of the worth or merit of a person or thing is not to be had from surface appearances, nor, indeed, from popular beliefs, which more often than otherwise are but the result of superstition and ignorance, and have their foundation in a perverted credulity.

Not many decades have passed since most diseases of children had their supposed origin in one of three causes, viz: "Catching Cold," "Teething" or "Worms." It is not surprising that such ignorance of etiology should have applied to it equally flagrant errors in treatment.

A careful investigation into these causative factors have shown their fallacy, and the treatment of infantile diseases are varied to suit known pathological conditions.

Fifty years ago bleeding was universally practiced in nearly all diseases. As we look back on the literature of that period we are astounded at the inconsistencies of that practice. Conditions which, in their nature, were diametrically opposite had the same treatment. They were all bled.

If we review carefully the literature of the profession on the use of alcohol as a medicine we shall find contradictions as numerous as those of blood-letting. There is scarcely an ailment known that it has not been vaunted as an indispensable agent in treatment. Its very prominence and great reputation has naturally in this critical and scrutinizing day brought it under the crucial test of scientific investigation. And we must admit that every movement in this direction has weakened its claims as a "cure all" and furthermore has proven beyond a doubt that in a large majority of the diseases in which it has been used so extensively it has been productive of evil instead of good.

Before proceeding to particularize, let us review impartially some of the physiologic effects of alcohol: When taken into

the stomach its first effect is that of an irritant, and a slight increase of gastric juice results. If the dose is large or often repeated the local irritation is increased to such a degree that hyperemia results and a tough mucus is thrown off which has no solvent properties on food, and if the drug is continued acute or sub-acute gastritis follows. In the habitual drinker the gastric mucous membrane becomes thickened and hypertrophied, and erosions more or less found.

The theory that alcohol is in any way an aid to digestion, except possibly in very minute quantities and then when used only for a short time, is a mistaken one, and that it seriously interferes with or arrests the process of stomach digestion is a fact as well authenticated as any other in medicine. Its action on the brain and nervous system is that of a paralyzant. In a small dose its initial effect on the sensory functions of the brain is apparently stimulating, that is, thought is quickened, and there is a general sense of well-being and freedom from care. This, however, is very transitory and is succeeded by a feeling of lassitude and mental fatigue. Its effect on muscular action through the brain and nerves is to diminish the *feeling* of fatigue. It adds no original strength whatever to muscular activity. Its constant use or its use in large quantities is speedily followed by muscular paresis. There are two factors which contribute to its effect on muscular tissue. Central sensibility and peripheral excitability are decreased, the study of which are of prime importance in relation to the action of alcohol on the heart and arteries. The so-called stimulating qualities of the drug lies in this fact, viz: The pulse-beat is quickened and the heart's action is increased in frequency not on account of any original strength derived from the drug, but because of diminished central control of the heart's action and of the muscular coat of the arteries to which may possibly be added the irritating effect of the unassimilated alcohol in the blood.

If this be true, the whole theory of the use of alcohol as a stimulant needs to be rewritten. For, instead of being a stimulant in any good sense, its apparent action is deceptive, for while there may be an increased number in the pulsations of the heart and a dilation of the small arteries, both processes are the result of depressed nerve force, or in other words, are from want of inhibitory action of the nerve centers upon the muscularity of the heart and arteries. To prove the truth of this it is only necessary to increase the dose of the drug, and we have paresis of the voluntary

muscles indicated by a staggering gait, and finally complete relaxation of muscular fibre, sub-normal temperature, slow and stertorous breathing, a slow and weak heart, and at last paralysis of the vagus—and death.

The diseases of childhood in which alcohol has been recommended are quite numerous. In fact, as stated above, it has been by the older writers prescribed in nearly all the catalogue of ills of infantile humanity. More recently authors have discarded its use in some maladies, but still hold it up as an ideal stimulant in all wasting diseases, especially in gastro-intestinal disorders, in convalescence from acute inflammation, in fevers and diphtheria, and it is yet insisted by some of the wise men that infants tolerate it in larger quantities proportionately than adults, and that it should be given in frequent and even in large doses.

We venture the assertion that were it not for a wise provision in nature that the excretory and eliminative processes in infancy are so rapid, the disastrous effects of alcohol drenching would be much more manifest than they are.

Another reason why it may seem to be so well borne is that the helpless innocent cannot describe the peculiar sensations of vertigo and drowsiness attending its use, and still another is that when diluted and sweetened it does not offend the taste of the little innocent, and for aught we know, it may have a kind of hereditary taste and tolerance for the beverage—handed down to him from a bibulous father.

In the name of helpless innocence, we protest against this wholesale drenching of children with alcoholic stimulants, unless we can assign a better reason than the traditions of the fathers. To give a child whiskey to aid digestion is in the light of present well-known facts is nothing less than a piece of folly. It does not in any way assist the process, but on the contrary, does render the gastric juice less solvent. Its well-known tendency to excite inflammation of mucous surfaces is sufficient to exclude it in gastric, gastro-intestinal and in all inflammatory diseases affecting the alimentary canal. Unless, indeed, we shall adopt the dictum of Hahaneman, "*Similia similibus curanter*."

The treatment of the digestive tract in children is largely dietary after having thoroughly cleansed the alimentary canal by mild cathartics and by copious irrigations of both stomach and bowels, and the judicious use of antiseptic and protective medication. If stimulants are needed, atropia in proper doses is the best, to which

may be added morphia if an opiate is indicated. Then there are strychnia, digitalis, strophanthus nitro-glycerin, caffeine and other agents, which are known to be stimulants in the true sense of the word, and which may be given in emergencies hypodermically, and their effects obtained at once.

This applies not only to the management of bowel disease, but equally to any wasting disease.

ALCOHOL IN DIPHTHERIA—This is one of the diseases in which the good effects of the drug has had a wide notoriety. It may have done good, at any rate it was extensively used. So was many other remedies, and with little benefit.

Six years ago, on the floor of this Association the writer read a paper in which the treatment of diphtheria was passed in review, and as was well-known, all our efforts to arrest the disease previous to that date was very unsatisfactory, the mortality table showing a death-rate of about 60 per cent. of cases under any method of treatment.

I remember (if you will pardon the personal reminiscence) to have recommended antitoxin in the treatment of that dread malady. It was with considerable trepidation that I advocated the serum treatment, as my experience with it had been confined to but few cases. The paper provoked rather a lively discussion, and the most pronounced opposition was expressed to the use of the new treatment. In fact, being rather morbidly timid, I was overwhelmed with the criticisms and eloquent speeches by distinguished gentlemen denouncing the serum as worthless.

But to-day I stand here no longer to recommend antitoxin, for it needs no defense, being fully established, having exceeded the most sanguine expectations of its advocates; but I would like to enquire, what place alcohol has now in the treatment of diphtheria? Or is there any physician who would be willing to hazard the safety of the child or risk his own reputation in a case of diphtheria by failing to administer the required dose of antitoxin at the very first appearance of the disease?

If this is done early enough and in sufficient dose he will rarely need much other medication; and if in need of a stimulant, why not use coffee, strychnia and other agents known to be superior? In the practice of medicine we should use the *best* remedies, not those that are cheapest and easiest of access if it be possible to obtain the best.

Gentlemen, I do not pose as a reformer, and do not care to be listed with fanatics, but do insist that we should be able to dis-

criminate in the use of drugs, using in the treatment of any disease those agents which, while they fulfill indications, are likewise least harmful to the patient; and we should not be controlled in our opinions by theories or dogmas, which do not stand the test of scientific investigation.

The Proper Method of Vaccinating.*

By A. H. Ohmann-Dumesnil, A.M., M.D.,
Formerly Professor of Dermatology and Syphilology in the St. Louis College of Physicians and Surgeons and in the Marion Sims College of Medicine of St. Louis; Dermatologist to the Pius Hospital; Consulting Dermatologist to the St. Louis City Hospital, St. Louis Hospital, etc., etc.

Nobody, at this day, when confronted by the irrefragable proofs would be so foolish as to deny the efficiency of vaccination in preventing small-pox, nor the enormous good it has done throughout all civilized countries by not only limiting outbreaks of the disease but actually preventing its appearance, and, when it did appear, conferring immunity upon those who had enjoyed its protective power. In view of this fact it certainly becomes a matter of prime importance to know how to vaccinate properly, in the first place; secondly, to employ the right sort of lymph. For a good vaccination depends upon these two essential points, and, unless they be fully understood a success cannot be predicted in every case as it certainly should be and attested to by the result. In our present advanced state of knowledge there can be no excuse for a failure in vaccination any more than there can be for an epidemic of small-pox.

Vaccination has been looked upon for too long a time, and, in some quarters, is still looked upon as a very simple matter. Twenty years ago I protested against this manner of regarding the matter and subsequent experience has only confirmed me in this manner of viewing it. I then called attention to the fact that, in England a license must be obtained, after due and successful examination, to empower any practitioner to vaccinate. In other words, he must be qualified. In this country it has always been looked upon as such a trivial matter that every fond mother and every ignorant midwife has felt perfectly confident to do such a little thing, oftentimes with results which were not only serious but positively dangerous to life. I have had occa-

sion, on more than one request, to treat such cases and they were anything but encouraging. They were the best object lessons to impress the necessity of a knowledge of the proper methods to pursue in vaccinating and I never lost an opportunity of doing so in the case of my students. Vaccinating is really a minor surgical operation and like all operations, it is necessary to observe a certain technique in order to obtain a successful result. There cannot be too much attention to details because, after all, everything depends upon these.

The part to be vaccinated, which is usually the arm, should first be carefully cleansed with soap and water—warm or cold. But there are some who desire to use strong antiseptics, such as bichloride of mercury, carbolic acid, etc. There is no objection to this, but these should be washed off with sterilized water so that the site of vaccination may be aseptic. It is better not to use antiseptics. When the place has been prepared, a small area not larger than a quarter or a third of an inch in diameter, is to be scarified with a sterile steel instrument, scarificator, scalpel or similar instrument. In doing this only a horny layer of the skin is to be removed and in such a manner that a little serum will ooze but no blood. Having done this, the next step is to apply the vaccine. And right here I desire to make a small digression. The material which has, up to within a short time, been employed for vaccinating has been crusts, lymph from various vesicles, points covered with cow lymph, quills treated in the same manner, and lymph in tubes. To each one of these serious objections may be raised. Those which are applicable to all are that they are all apt to enclose pathogenic bacteria which will have a most deleterious influence upon the organisms of those who have been vaccinated. The material obtained from human sources may transmit syphilis, tuberculosis; and other infectious diseases. Cow lymph may transmit tuberculosis; and, in the countries where the disease exists, leprosy is easily transmitted in this manner. All the lymphs mentioned are easily decomposed and their use, after decomposition has set in, is very apt to bring on serious disturbances. It is quills and points which have been particularly harmful for two reasons. In some cases there has been no successful result and the vaccinator has not taken any pains to see if there has been one or not. Again, anyone who will take the care to examine points and quills carefully will encounter blood or pus upon these, and, on microscopic examination, pyogenic bacteria will be found in large numbers. This will real-

*Read before the St. Louis Medical Association May 8, 1900.

ly explain the formation of ugly, deep, destructive ulcers so often seen. This leads us directly to the question, is there a reliable harmless vaccine? There certainly is, and it is prepared and tested. To begin with, it is obtained from young heifers, free from diseases, this being established by means of the tuberculin test. The pulp of the cowpox vesicles is mixed with pure glycerin, this destroying whatever few harmless bacteria may be present. This is the method of making glycerinated vaccine. Messrs. Parke, Davis & Co. have gone a step further and have thus been able to furnish an aseptic vaccine of a superior quality. A sample of each batch is planted upon a culture plate and, if pathogenic bacteria develop, the entire batch is destroyed. Of course, a few saprophites will be found but being innocuous no harm is produced by their presence. A further safeguard thrown about their product by the house mentioned is to make a trial vaccination with material from each batch.

In vaccinating with glycerinated vaccine certain precautions should be taken in addition to those which have already been given. Blood should never be drawn when scarifying, and two sites for vaccinating are preferred by some operators, although not necessary with good vaccine. The vaccine should be thoroughly and persistently rubbed into the abrasion and permitted to dry until a pellicle is formed and the vaccine is dry. As in other minor operations too much hurry will result in failure. It follows as a natural corollary that the clothing should not be replaced before the vaccine is dry. Antiseptic dressings should be carefully avoided. All that is necessary is to apply an aseptic roller bandage. The result of a vaccination should be seen by the physician himself, not trusted to the patient, his parents, or friends. A swollen arm, inflammation or inordinate pain are not necessary to establish a success, but a vesicle is, and time must be allowed for it to develop.

With these few precautions, a strict adherence to the technique given, and reliable aseptic vaccine, not older than a month, a successful result will show itself in every case.

Chancres of the urethra are found in the first inch and accessible to the physician's touch and eye; deeper ones are very rare, so the "supposed" deeper ones are probably not chancres, but peri-urethral phlegmons, which do well under appropriate treatment.—J. N. Hyde, in *Journal A. M. A.*

A Male Pseudocystic.

It seems that the fair sex has no monopoly of pseudocyesis. There is a French story about a certain Dr. Campbell, who, although British, practiced in France and made a specialty of obstetrics. He kept only one of his former British patients, and that one, strange to say, was a man, a crazy lord who at intervals imagined himself to be pregnant. He would procure the proper out, in due time he would take to his bed, and he would send for Campbell, who found him apparently in the throes of childbirth, and they would not cease till some newborn baby was procured and palmed off on the sufferer as his own offspring. On one of these occasions no baby was to be found, but a collegian in uniform happened along, and the daring makeshift was tried of seizing upon him and passing him off as a neonatus. The trick proved successful. "Ah!" cried Lord D, with a sigh and patting the young man on the cheek, "this explains why I suffered so much; it was the but-tons!"—*Medical Standard.*

Celery as a Carrier of Infection.

The Maryland Medical Journal points out in a recent issue the danger of contracting typhoid fever from truck gardens, with their free use of fertilizers from all sources.

An epidemic of typhoid fever occurring in a State institution was apparently traced to the use of celery grown on some sewage-fertilized grounds, the practice of banking up the stalks making these plants especially adapted to receiving and holding the germs. As soon as the use of the plant was stopped the epidemic diminished, and finally ceased altogether. The facts indicate the need of caution in using this popular vegetable, which, with its corrugated stems, etiolated by banking up with earth often saturated with fertilizers of one kind or another, and generally eaten raw, might very possibly carry disease germs.—*Dietetic and Hygiene Gazette.*

W. Irving Hyslop, M.D., 4408 Chestnut St., West Philadelphia, Pa., says: I have used Celerina quite largely both in private and hospital practice, and with gratifying results. It is void of repugnant taste and is readily retained by the stomach. My experience with Celerina has been confined chiefly to its use in nervous diseases, particularly loss of nerve power, and the opium habit, in which conditions it has served me well, and I shall continue to prescribe it both in private and hospital practice.

THE
Charlotte Medical Journal.

Editorial Department.

E. C. REGISTER, M. D. J. C. MONTGOMERY, M. D.

Editors and Publishers.

No. 36 SOUTH TRYON STREET, - - - -

- - - - - CHARLOTTE, N. C.

SUBSCRIPTION. \$2-50 PER YEAR,

CONVINCE A MAN AGAINST HIS WILL.

They have been kicking up a good deal of racket in San Francisco in reference to the plague. Several eminent bacteriologists and medical experts said that certain patients had died of the plague: several mercantile companies and their employees said that it was not so and to prove it they raked out the aforesaid eminent bacteriologists and expert medical men and called them names which are not to be found in Gould's New Dictionary. It does seem as hard to convince a San Franciscan that they had plague in 1900 as it was to convince a tar heel that we had small-pox in 1899. Don't convince a man against his will or against his pocket book, for he will be of the same opinion still.

We do hope that they have had no plague in San Francisco but it can never be proved one way or the other by abusive language.

THE MISSISSIPPI VALLEY MEDICAL ASSOCIATION.

The twenty-sixth annual meeting of the Mississippi Valley Medical Association will be held at Asheville, N. C., October 9, 10, and 11. A more suitable place could not have been selected and the Buncombe County Medical Society will entertain the large crowd of representative men in manner that they will not soon forget.

We are glad to welcome this influential body of medical men to the State and they will doubtless carry away many pleasing recollections of the mountains of North Carolina.

After they have seen our country they will all work for the establishment of the Appalachian National Park. The work of this society has helped the progress of medicine in the past and the business of this meeting will be to further advance the

cause of true medicine.

Dr. I. N. Love, of St. Louis, the well known editor will deliver the address in medicine; and Dr. C. A. Wheaton of St. Paul, the address in surgery.

ANNOYING CALLS.

The strain in the physician's work is not upon the muscles or the bones, but upon the grey cells and the white fibres of the nervous system. Much of his work is worry and the weight of responsibility. After practising for a few years a class of patients accumulate that we would rather not have. We get out of patience with them and though we still go when they send, it is with mutterings and disgust.

And this is the kind of work that is particularly worrying and burdensome. Work met half way is half done, but labor shunned is work doubled twice upon our shoulders.

It would be better to refuse positively to go or to go willingly; better for our peace of mind and oftentimes better for the patient. It is hard to counterfeit glee, but we should endeavor to learn how to answer calls in at least a contented frame of mind and, if possible, joyfully.

To get a call to go to see some good-for-nothing fellow, just after dinner during the hot spell in summer, is not very inspiring and glad thoughts refuse to come at such bidding. Two o'clock calls on a dark, cold, winter night do not cause any great degree of hilarity on the part of the doctor, but if we can only look at these things philosophically and go willingly, or refuse positively, it will very much lessen the wear and tear on the nervous mechanism.

Having put our hands to the plough let us not look backward.

OFFICERS OF SECTIONS FOR 1901.

The President of the State Society, Dr. Baker, has appointed the following Chairmen of Sections for the Durham meeting in May, 1901.

Pathology and Microscopy—R. H. Whitehead, M. D., Chapel Hill.

Anatomy and Surgery—R. L. Gibbon, M. D., Charlotte.

Medical Jurisprudence and State Medicine—H. W. Lewis, M. D., Jackson.

Obstetrics—F. H. Russell, M. D., Wilmington.

Gynecology—J. F. Highsmith, M. D., Fayetteville.

Practice of Medicine—H. T. Bass, M. D., Tarboro.

Materia Medica and Therapeutics—A. Cheatham, M. D., Durham.

Chemistry and Physiology—E. Delia Dixon, M.D., Raleigh.

Pediatrics—Sallie Borden, M.D., Goldsboro.

Railway Surgery—G. G. Thomas, M.D., Wilmington.

The success of the meeting depends, in a large measure, upon the zeal and activity of the different Chairmen, and the Secretary is confident in his prediction of a most profitable session at Durham next year.

Each Chairman will endeavor to secure eight or ten papers to be read under his particular section. Members of the Society who intend to read papers would save lots of trouble if they will send in to the Chairman, in whose section they wish to read, the title of their paper.

If all those who are interested in the work of the Society will keep a lookout for interesting cases and write them up we can have a very profitable meeting. Don't wait for the Chairmen to write to you, but send him the title of your paper as soon as you decide upon it. The title of all papers must be the hands of the Secretary 30 days before the date of the meeting, and it would help him very much in getting out a working program if the titles could be in hand 60 days before.

Get your papers ready for a record-breaking meeting next year.

HEROIN.

The demands made upon a new remedy before its admission to a permanent place in the materia medica are now-a-days much more exacting than in the days of empirical pharmacy. Careful physiological experiments in the laboratory and accurate observations of its therapeutic action in large hospitals must precede its introduction. This is well illustrated in the case of Heroin. This remedy was submitted to the most careful experimental studies on animals by Professor Dreser, of Germany, and later by Medea, of Italy, Impens, of Belgium, and Ott, of America. These experiments, which are in complete accord, showed that the drug possessed a specific influence upon the respiratory apparatus, consisting in a reduction of the frequency of respiration with an increase of its force and volume. They further showed that heroin is much safer than the opium alkaloids, and that its action upon the respiratory organs is much superior to the latter both in promptness and efficiency. The popularity of heroin, therefore, rests upon a sure and scientific foundation. The numerous clinical reports that have appeared both in America and European literature

coincide in assigning to this remedy a high place in the treatment of broncho-pulmonary affections, both for the relief of cough and dyspnea. It is remarkable that in spite of the fact that the drug has now been used by thousands of physicians, and that it has been made the subject of a voluminous literature, that so few cases of ill-effects are on record. In only four cases were these effects deemed sufficiently noteworthy to deserve mention. Dr. Manges, who has made the most complete study of the therapeutics of heroin, as revealed both in the literature and in his own personal investigations, remarks, that after-effects are chiefly attributable to the use of excessive doses, and that they are much less common than from morphin or codein. This would show, therefore, that when employed in a rational manner, the dose being graduated according to the age and indications present in individual cases, heroin is superior in reliability and safety to any of the remedies which were in common use before its introduction.

THE RELIEF OF PAIN.

In the very nature of things we are obliged to treat some diseases altogether symptomatically and if any one symptom should be especially prominent it becomes our duty to direct our attention directly against it.

Pain may not be very dangerous to life but if very acute it may constitute the one thing above all others to be relieved. In the progress of civilization we have been so modified as to be able to stand less pain than our forefathers and so many of our hurry calls are not because life is in immediate danger but because the patient is suffering, as he believes, intolerable pain. In biliary or nephritic colic, in intestinal colic, in abscess formation in dense or unyielding tissues, in neuritis and in other conditions, pain is the first symptom demanding instant attention. And in such cases there is no medication better than a full dose of morphia subcutaneously.

The action of morphia in such conditions is certain and speedy though there are some exceptions. A physician once told us that it was a pleasure to him to treat cramp colic as he was so sure of the results. A full dose of morphia hypodermically and a quick purgative as soon as the pain was allayed, ended the matter to the entire satisfaction of the patient. If it were possible to limit the use of morphia to the pain of acute inflammation, there would be fewer victims of the morphia habit; but the physician, accustomed to the prompt relief

afforded, is tempted to use it in the various chronic pains and aches and if he yields the future welfare of the patient is placed in jeopardy. In subacute and chronic inflammatory pains it is oftentimes infinitely better to bear the ills we have than to fly to others we know not of. We should look carefully into the cause of pain and if it is slow and chronic in its nature, the simpler the remedy the better, if it is acute and temporary then morphia may be used with confidence. In chronic pains we may use heat or cold, counterirritants anodyne liminents locally and acetanilid or its combinations internally but be very cautious with your hypodermic.

CONSTIPATION CURED.

A professor of gynecology once said that there were two seas upon which he sailed the bark of his professional life. Corsets and constipation. And the greatest of these is constipation. We have been worried out of ten years of our life trying to find a remedy for constipation and are still on the hunt.

Some people eat stewed prunes, others have the rectal valves split. But W. B. Clarke in the American Homeopathist for August 1st. comes forward with a new and as he says effective remedy.

It is simply sand, just plain sand, and we must say that the doctor has lots of "sand" to propose such a remedy.

He says that the best sand to use is that from a river sandbar which is rather coarse, this is for adults.

For children he takes it from the sand-chest of a locomotive as it is finer and needs no preparation. The river sand is thoroughly washed and then baked in an oven.

It may be taken plain or inclosed in capsules or made into pills with syrup in each case being washed down with water, in fact water must be drank freely during the treatment. The dose of sand varies, his most obstinate case took a teaspoonful three times daily before he was cured. Usually from one-half to one-third of a teaspoonful once daily will be found sufficient. This method is at least inexpensive, in truth it is dirt cheap. He says that we should not inform our patients as to what they were taking but call it a new mineral cure for constipation. We have no objection to make against this treatment except that the dose seems rather large for a homopath.

It seems to us that after carefully washing the sand if the doctor will take three medium size grains and shake them up in

four ounces of water, (shake well), then take one drop of the water and allow it to evaporate in the sunshine, collect six or eight ounces of the next rain that falls and give a teaspoonful three times daily he will have an ideal homeopathic remedy. In all seriousness plenty of water is good for constipation taken with or without sand.

OBSERVATION.

In the olden times the physician was also the priest and prophet. To him the people looked as to one possessed of marvelous insight and miraculous power. In these latter days much of this feeling has passed away, but there is still a lingering trace in the absolute confidence some patients have in their medical man.

In the eyes of a few the diagnosis of the physician is still a matter of intuition, and his prognosis is regarded as prophesy. A recent editorial in an exchange advocates the use of the Sherlock Holmes method in certain cases as tending to inspire confidence, without which, in many cases we will fail to cure the patient.

It is related that a certain distinguished eye man on looking at an inflamed eye said, "madam, you keep birds, and four days ago you were feeding them, when your eye was injured." The patient acknowledged the correctness of the diagnosis and clinical history and went away deeply impressed with the wisdom and skill of the doctor. The specialist had seen a small husk of bird seed on the conjunctiva and his familiarity with inflammatory processes in this region enabled him to say that it was four days old.

Another distinguished surgeon, in treating a young girl, had occasion to tell her that she must not carry a baby on her arm; on her return to his office, three or four days later, he said, as soon as she stepped into the room, "you have disobeyed my command." The girl protested, but he told her that she had held a baby on her left arm within the last hour. She then admitted the fact and went away wondering. What the surgeon saw in this case was a tell-tale trickle of urine diagonally across the girl's apron.

This reminds us of the old practitioner who took a young doctor with him to see an old darkey who was said to be very sick. After feeling the patient's pulse and looking at his tongue, the old doctor said: "Too much watermelon in your stomach," to which both the old darkey and his wife assented.

When they were on the road again the young man asked how he could tell it was

watermellon by simply looking at his tongue. The old doctor, with a twinkle in his eye, replied: "By the washpan full of rinds under the bed."

Sometime afterwards the young man with the lesson laid up in his heart, was called to see a very sick negro on an adjoining plantation. After feeling the pulse and looking at a very thick tongue he said, "you have been eating too much horse." The colored man, in an injured tone, denied the charge, and the young pill roller had to hunt up a new diagnosis. On being asked why he thought the patient had eaten a horse, he replied: "There was a bridle and saddle under the bed."

While the liability to make as great a mistake as the young doctor is very remote, still in following Mr. Sherlock Holmes we should be very careful, or instead of inspiring unbounded confidence we may pull down a pile of ridicule. Every doctor should have a special training in observation. Experience is only trained observation. The young man fails oftentimes because he did not see. The man of experience comes into the sick room and in one comprehensive glance sees every detail of its arrangement. A look at the patient and he locates the part of the body affected, a few questions and the diagnosis is made in the rough.

To the young man all sick folks look alike, he asks many unnecessary questions, overlooks many important points, and his diagnosis is reached only after twice the labor and time of his experienced brother.

It is told of a surgeon that he carried rocks in his coat tail pockets which he was continually sounding with a steel sound. In searching the bladder for stone he was an expert. So the mind can be trained to see minutely, in detail, everything that comes under the eye.

MALARIA AND THE MOSQUITO.

The connection between mosquitoes and the prevalence of malarial fever has been definitely worked out by Ross, Manson and others, but the practical value of this demonstration remains to be worked out by the everyday practitioner.

The common ordinary kind of mosquitoes do not produce, or serve as carriers of, malaria.

Gerald McCarthy, in the Bulletin of the North Carolina Board of Health, tells us, in a very interesting paper, some facts in regard to the life history of the malarial parasite.

The genus *Culex* is the ordinary mosquito that keeps us awake these warm nights,

but his cousin the *Anopheles* gives us chills and fever at a moment's notice.

They differ especially in the way they bite, the *Culex* takes his nourishment on a dead level, while the *Anopheles* stands on his head, or her head perhaps, in order to get his bill down to a better depth.

Mr. McCarthy says that the parasites of human malaria exist in the blood stream at first in the form of amœboid, motile jelly dots. They grow fast and usually in from one to three days attain full size. They then pass into the spore form as sporocytes and gametocytes. The sporocyte is the asexual form. It at once begins to form a sort of capsule in which appear asexual spores. These spores, according to the species, mature in from one to three days. The capsules then burst, the spores fall into the serum and soon after assume the amœboid form. They move about in the blood serum until they find a red capsule to attack. The bursting of the spore sacks and the storming of the blood corpuscles by the new generation of protozoans is correlated to the period of recurrence of the fever, and is the cause of the same.

The gametocytes are the sexual form. They do not undergo any further change in the human body except as they may degenerate and die. They may, in this way, circulate in the blood stream for days and weeks. If a mosquito of the genus *Anopheles* sucks the blood of a person in whose blood stream the gametocytes are circulating the cysts as soon as they reach the fore crop of the insect burst. The microbe resumes the cycle of its development. Some of the cysts produce male, some female germs. These coalesce and the result is a new individual or zygote. These grow rapidly, are very active and repel the attacks of the phagocytes of the human blood in which they were borne into the alimentary tract of the insect. The zygotes soon bore through the stomach walls of the mosquito and fix themselves upon the external surface in the form of oval cells of from 8 to 10 micromillimeters in diameter. These cells subdivide much like the egg of a vertebrate, and eventually form a capsule full of small spores—each capsule, when mature, is 60 micromillimeters to 80 micromillimeters in diameter, and may contain several thousand spores.

The whole process from the time the gametocyte enters the body of the insect until the spores are formed is about ten to twelve days in summer. It is longer in cooler weather. These sexual spores are motile and move about until they reach the blood stream of the insect. In this they

are carried into the salivary glands. When such a mosquito bites a person she injects into the wound some of the saliva and with it the spores of the protozoan. These once in the human blood stream assume the amœboid form from which we started, and so begins a new cycle.

It may be asked what becomes of gametocytes which do not find their way into the body of an *anopheles*. They eventually degenerate and are eaten by the phagocytes. The same fate, sooner or later, overtakes the sporophytes in the human blood. If, instead of *anopheles*, it is *culex*, which receives the gametocytes, so far as we know, the latter do not develop further but are digested with the blood in which they are imbedded.

Now a few words as to the classification of the protozoan parasite.

The latest authors make two genera :

I. *Hæmamoebidæ*.

II. *Hæmomenas*.

The first genus contains four species. Two of these produce malaria in birds. The other two in man.

Hæmamoeba malaricæ causes quartan fever.

Hæmamoeba vivax causes tertian fever.

Hæmomenas has but one species.

H. præcox (*Laverania malaricæ* of older authors).

It causes pernicious autumn malaria in man.

The life histories above outlined are not based upon theory, but upon microscopic dissections. They are as true as anything can be in science.

He says that drinking water has no part in the etiology of malaria, and that the tearing up of surface soil in hot weather does not produce malaria.

To the statement that malaria can not be caused by impure water, Dr. Lewis, the Secretary of the Board of Health, takes exception. The fact that impure water may cause malaria has been proved by experience, which knocks out any amount of theory in the first round. But the mosquito should bear an important part of the blame and our efforts should be towards a practical application of this truth.

As a topical application to prevent mosquitoes from biting, nothing equals kerosene or coal oil, in our experience. To suspend a small flannel rag, wet in kerosene, at the open window or door will keep them out of the room. Rub some over the hands and arms, and lightly through the hair, and it will compel a roomful of mosquitoes to stand back.

BOOK REVIEWS.

Practical Urinalysis and Urinary Diagnosis. A Manual for the Use of Physicians, Surgeons, and Students. By Charles W. Purdy, LL.D., M.D., Queens University, Fellow of the Royal College of Physicians and Surgeons, Kingston, Canada; Professor of Clinical Medicine at the Chicago Post-Graduate Medical School. Author of "Bright's Disease and Allied Affections of the Kidneys"; also of "Diabetes: Its Causes, Symptoms, and Treatment." Fifth Revised and Enlarged Edition. With numerous Illustrations, including Photo-engravings, Colored Plates, and Tables for estimating total solids from Specific Gravity, Chlorides, Phosphates, Sulphates, Albumin, Reaction of Proteids, Sugar, etc., etc., in Urine. 6x9 inches. Pages xvi-406. Extra cloth, \$3.00 net. F. A. Davis Company, Publishers, 1914-16 Cherry St., Philadelphia.

This standard work on Practical Urinalysis and Urinary Diagnosis needs no introduction to our readers. This, the fifth enlarged and thoroughly revised, edition contains much new matter which greatly enhances the value of the work. The use of the microscope, in this connection, is fully and concisely explained making it easy for the student and a pleasure for the practitioner who has not been fully satisfied with the results of his microscopic findings. Centrifugal analysis has been greatly extended in the past few years and has been reduced to practical results which are exact. The work is handsomely gotten up and the colored plates are especially beautiful, making a very artistic as well as useful book, eminently suited to the everyday wants of the practitioner and the student.

Lessons of the Anatomy, Physiology and Hygiene of Infancy and Childhood. Consisting of extracts from lectures given at Rush Medical College, by Alfred C. Cotton, A.M., M.D., Professor of Diseases of Children; Accoucheur and Physician for Diseases of Children Presbyterian Hospital; Staff member of the Central Free Dispensary and the Cook County Hospital; President of the Chicago Pediatric Society; Member of the American Pediatric Society, etc. 100 Illustrations, Cloth, \$1.50, net, postpaid. Chicago Medical Book Co., S. E. corner Congress and Honore Sts., Chicago, Illinois.

The need of a concise text-book on the anatomy, physiology and hygiene of the growing period, is well supplied by this book. One may have a fair knowledge of these subjects as found in adult life and yet be unprepared to properly consider the pathology and treatment of disease in the

young child. The important subject of hygiene at this time of life is one of great value to those who would minister to the wants of the growing child.

The book is profusely illustrated and the text is well prepared and will repay a careful study.

The Theory and Practice of Taxation. By David Ames Wells, LL.D., D.C.L., Author of *Recent Economic Changes*, etc. Cloth, 648 pages. New York: D. Appleton and Company. 1900.

Death and Taxes are the sure things of this life, and while we are guessing about the uncertainties we should endeavor to follow Mr. Dooley's philosophy by learning as much as we can about the certainties.

The author of this work is a well known authority on economic subjects and he writes in an easy style which is readily comprehended.

He reviews the history of taxation in an interesting way and then discusses the existing methods of taxation, Double Taxation, What is Property? Theory and Practice of Income Taxation, What Should be Taxed and How, The Law of the Diffusion of Taxes, The Best Methods of Taxation.

We are all interested in this subject, whether farmer or professional man, as it is one of vital interest to our community as well as to our State and nation. The duty of citizenship requires the broadest knowledge of such matters and this book should be read by every thinking man.

Robert Tournay. A Romance of the French Revolution. By William Sage, with Illustrations by Eric Pope and Mary Ayer. Boston and New York. Houghton, Mifflin and Company. The Riverside Press, Cambridge. 1900.

The historical novel is good reading, we find many facts in with the pleasing fancy. Robert Tournay is a man after our own heart, he fights and loves in the same kind of vigorous spirit. While the stormy days of the Revolution brought to light many of the contemptible qualities in man, there can be no doubt but that the noble and tender instincts were brought out in many instances. The author gives an insight into the probable conditions of the two opposing classes in that great struggle. The nobility and the lower classes are followed in their purposes with much interest and examples of true nobility are to be found in both. Tournay is more noble than the Baron, while de Lacheville is lower than the meanest villian. Edme is a real heroine in her interview with *La Liberte*. Danton and Robespierre are interesting characters in

the plot and the crisis of the story revolves around them,

A most interesting story of a most interesting time.

Medicine as a Business Proposition. By G. Frank Lydston, M. D. Paper, 32 pages. 25 cents. The Riverton Press, 132 Market St., Chicago.

Every doctor in the land should read this pamphlet by Dr. Lydston. The subject is a vital one to every physician and the sound common sense of the author's reasoning is certainly refreshing. He handles sarcasm as an expert and by its use presents the facts in the case with much emphasis. He considers the Financial Rewards of the Practice of Medicine; False Pretences of Prosperity; Lack of Judgement of Human Nature; College, Hospital and Dispensary Evils; Medical "Tin Goods;" Superabundance of Medical Colleges; Inconsistencies and Absurdities of Ethics; Ready-made Doctors and Proprietary Medicine Fakes; Our Co-laborer, the Druggist; Relations of Doctors to Corporations; Fees in General; Excess of Business Zeal; Tacit Recognition of Medical Fakirs.

Unleavened Bread. By Robert Grant. Cloth, 432 pages, \$1.50. Charles Scribner's Sons, Publishers, 153-157 Fifth Ave., N. Y. City. 1900.

Mr. Grant easily sustains his reputation as a writer, in *Unleavened Bread*. His courtships are rather short but what they lack in quality is amply made up in quantity.

Selma the central figure of the story is rather Chicagoean in her experience but acquits herself with rare prudence.

Babcock is parted with in genuine sympathy. The method of treating pneumonia in New York City is touched upon but it seems that oxygen in large brass cylinders could have been used with good effect.

The interest in the story is well maintained throughout and anyone, who can appreciate the delineation of character, will enjoy following Selma through the windings of her loving life.

The Redemption of David Carson, by Charles Frederic Goss. Thirty-first Thousand; 12 mo. Cloth, 418 pages, \$1.50. Indianapolis: The Bowen-Merrill Company, Publishers.

Any physician who loves a good tale will enjoy this book.

The ups and downs of a quack doctor and his close association with the hero of the tale, appeal very strongly to the professional man. The other man's wife, though a very delicate subject, is brought in so as

not to offend. The Gypsy girl is a strong character well drawn, the virtues are lovely and the vices are disgusting.

The author has given us a story in plain print which has been already written deep down in the heart of man.

Twelve editions of this work have been exhausted within three months and the demand continues unabated.

The Bowen-Merrill Company have established themselves as the makers of popular books that are really worth reading.

Transactions of the Southern Surgical and Gynecological Association. Volume xii. Published by the Association. 1900.

The twelfth session of this well known society was held at New Orleans, December 5, 6, and 7, 1899.

The volume of proceedings is uniform with those issued in the past and make a welcome and valuable addition to any library.

Among the papers of interest are those by Wm. D. Haggard, Jr., Noble, Matas, Marcy, Richardson and Kelly.

The paper by Richardson on "Two Cases of Esophageal Diverticulum," shows very clearly the superb skill of this well known surgeon.

The next session of the Association will be held in Atlanta on the second Tuesday in November, 1900. Dr. A. M. Cartledge of Louisville, is President, and the reliable Dr. W. E. B. Davis of Birmingham, Secretary.

The Association is to be congratulated on its Transactions and especially for its Secretary.

Transactions of the Vermont State Medical Society for 1899. Burlington. Free Press Association Printers. 1900.

This is a very creditable volume for a State society having only 225 members and contains some excellent papers.

Richardson has a most exhaustive paper on "Perforated Gastric Ulcer." The work is clearly printed on good paper and well bound.

The page heading should conform to the text as a convenience, otherwise the society and the secretary are to be congratulated.

Transactions of the Kentucky State Medical Society. New Series. Volume viii. Printed for the Society. 1900.

The Secretary of the Kentucky Society deserves a banner as he is the first to put out a transactions for 1900. Most Societies have trouble in getting out their proceedings in time to prevent their contents hav-

ing become stale and out of date, but Dr. Steele Bailey of Stanford, Ky., certainly does the work promptly for his State. The meeting was held at Georgetown, May 9, 10, and 11, 1900, and, from the number and character of the papers presented, it was profitable as well as pleasant. This volume contains 40 papers, some of them very valuable, all worth reading.

LITERARY NOTES.

"Can China be Saved?" is the title of an exhaustive article by Talcott Williams in the Review of Reviews for Septembsr. Mr. Williams possesses a rare fund of information on Oriental subjects, and he has a definite programme to offer for the solution of the world-problem in China. Taking as a model the Imperial Customs Service, so long and ably administered by Sir Robert Hart, Mr. Williams proposes to organize the Chinese Government in a system of commissions, under nominally Chinese control, but officered by Europeans, just as the customs service is now officered. The present Chinese civil-service machine would be retained, because it is suited to the temper and needs of the people. In the same magazine is an able defense of the missionaries in China by the Rev. James S. Dennis, D. D., the author of "Christian Missions and Social Progress"; "Japan's Present Attitude Towards China" is the subject of a paper written in Japan as recently as July 24 by Mr. Joseph King Goodrich, an experienced observer of Japanese politics, and the Rev. William N. Brewster, a missionary of the American Methodist Church at Hinghua, writes from that point of view regarding the duty of the United States Government in the coming reconstruction of China. These four articles have been written within a few weeks, from four distinct points of view, by men long familiar with the conditions about which they write, and with direct reference to the present crisis.

Among the thirteen articles which make up the September issue of The Forum are many which from the point of view of timeliness and interest can hardly be beaten. Indeed, The Forum, though laboring under the disadvantages which attend every monthly magazine, manages to retain a great deal of that up-to-date-iveness which is the happy endowment of a live daily. With China as a burning question in the September issue, we find Prof. Paul S. Reinsch considering the problem of "China

against the World" and Mr. D. W. Stevens, Counsellor to the Japanese Legation at Washington, setting forth "Japan's Attitude toward China." Turning homeward, and taking the Presidential campaign for *pabulum*, the reader has Mr. George E. Roberts's clear explanation of the meaning of "The Kansas City Financial Resolution." Mr. H. L. West's thorough, side-by-side examination of the Republican and Democratic platforms, and Ex-Governor Stone's presentation of "the Campaign of 1900, from a Democratic Point of View."

Other articles of more general interest are Mr. W. W. Rockhill's authoritative account of "The Bureau of the American Republics"; Mr. Albert H. Washburn's "Plea for Consular Inspection"; Prof. Willcox's explanation of "American Census Methods"; Mr. E. L. Johnson's eloquent advocacy of the cereal merits of the cottonseed; Prof. Max Muller's criticism of "The Present Anti-English Feeling among the Germans"; Mr. Walter B. Scaife's essay on "Work and Wages in France," and an enlightening article on "The Constitutional Crisis in Austria" by Dr. Maurice Baumfeld. Prof. W. P. Trent also contributes an appreciative criticism of Mr. Frederic Harrison's last book of essays.

September is the most popular month for camping excursions, because it combines the last month of trout fishing with the first month of deer hunting in most of the great preserves. It is therefore appropriate that the September number of Scribner's should have an outdoor flavor to many of its articles, and that the illustrations should suggest sport and adventure in many out-of-the-way places.

The Living Age for September 8 translates from the Nuova Antologia a rather pessimistic presentation of "Diplomatic Ineptitude and the Chinese War," by the distinguished Prof. Lambroso.

Matthias Dunn's article on "Mimicry and Other Habits of Cuttles" in the Living Age for September 1 is a curious and original contribution to the popular study of natural history, in a new field.

ABSTRACTS of the One Hundred Leading Articles of the Month.

Antitubercle Serum in Tuberculosis.

J. Edward Stubbert in the Medical News for August 18th, has a paper in which he

gives the subsequent histories of patients apparently cured under the administration of antitubercle serum as an auxiliary to climatic treatment.

He says that the reports of cases of tuberculosis treated with antitubercle serum under unfavorable climatic conditions are comparatively meager, but so far as they go the results seem to have been unsatisfactory. Therefore, it would seem as though, instead of a hoped-for specific, we have in antitubercle serum simply another auxiliary to climatic, hygienic and dietetic treatment. Its comparative greater merits as such an agent in the treatment of cases in the incipient stage seem to place it ahead of all other recognized agents in a large majority of instances. Its greater value may not be so well demonstrated in its immediate effects, as in the fact that, apparently, there is established an immunity, the duration of which is as yet not determined, and can only be measured by years of observation.

In this connection it may be noted that among patients apparently cured while taking creosote, as an auxiliary to climatic influences, a few instances of relapse have occurred. Finally, the results of two years' further study of the subject would seem to indicate: (1) Further confirmation of the conclusions of the preliminary paper in 1898. (a) The use of serum does not tax the functions of digestion or produce gastritis, diarrhea, or loss of appetite. (b) In cases wherein bacilli have disappeared, they have been lost while the sputa were still present, whereas in creosote cases the last specimens of sputa still contain bacilli. (2) Immunity seems to be established in apparently cured cases, capable of protecting the patient effectually in his old environment at least two years, and perhaps for a longer period. (3) The fact that cases for treatment must be selected, even among those in the incipient stage, and that it is less effective in low altitudes and city environment, conclusively ranks antitubercle serum among the auxiliaries to climatic treatment of phthisis, rather than as a specific.

Acute Dilatation of the Heart in Influenza of Children.

T. Forchheimer, in the Boston Medical and Surgical Journal for August 9th, describes two cases of this grave complication of influenza in children.

He quotes Huchard in saying that the attack manifests itself by syncope and faintness, which may become fatal, by slow pulse, by arrhythmia or intermittence, by grave symptoms of cardiac collapse, and

sometimes by pains resembling angina pectoris.

He considers heart strain the direct cause of the trouble. He thinks that we are justified in assuming two forms of heart dilatation in influenza.

One presumably produced by the action of the toxin upon the nervous system of the heart and possibly upon the myocardium; the second form occurring in such conditions in which outflow of the blood is materially interfered with on account of mechanical conditions.

Acromegaly and Giantism.

Woods Hutchinson in the N. Y. Medical Journal for July 28th, concludes an article on the pituitary gland as a factor in acromegaly and giantism. He says:

That the pituitary body is still functional.

That disturbances of its metabolism are the principal factors in both acromegaly and giantism, the difference between the results being simply due to the stage of individual development at which the disturbance of the function begins.

That the nature of the overgrowth in both these diseases is primarily on the order of a pure functional hypertrophy; later, however, losing some of the definiteness of its impulse, and either producing immature tissue of a mixed type or resulting in simple hemorrhagic exudation, with either cyst formation or complete breaking down of the tissue mass.

That it seems probable, although upon this head the evidence is still uncertain, that some part is played by this body in "dwarfism," rickets, and the dwarf forms of cretinism.

That a reflex disturbance of its function may possibly underlie the dystrophy accompanying pharyngeal adenoids.

That it would appear to be a sort of "growth centre" or proportion-regulator of the entire appendicular skeleton.

Acute Edema of the Larynx.

In the Journal of Laryngology for July, Logan Turner reports a case of acute edema of the larynx, the patient dying before surgical assistance could be obtained.

He had suffered for some months from hoarseness, but had never had any respiratory difficulty, and had continued working as a stonemason until two days before his death. He then appeared to be in fairly good health and spirits. During the night before his death he had experienced some slight difficulty in breathing, but on the following morning had expressed himself as feeling quite able to go out. After break-

fast, however, he suddenly developed dyspnoea, and died within half an hour.

Post-mortem examination showed the internal organs healthy with the exception of the lungs, which were tubercular. In the larynx the glottic chink was invisible, owing to marked œdematous swelling of the ary-epiglottic folds, arytenoid region and ventricular bands. The epiglottis preserved its normal contour, being free from œdema. Further examination of the larynx revealed almost complete destruction of the left vocal cord, and some superficial ulceration of the right, while an ulcer of considerable size and depth occupied the inner and upper aspect of the left ventricular band. The case is of special interest as a demonstration of a possible sudden fatal complication in the course of laryngeal tuberculosis, without any previous symptoms of difficult respiration.

A Product of "Mortal Mind."

E. S. Goodhue, in the Southern California Practitioner for July, says that it is the fashion, and much in accordance with certain hard-to-be-understood "sciences," to believe the remote; to accept the improbable rather than the probable. If we are to deny the existence of what we see and feel; if we must call a broken leg a morbid thought, why not believe that all which appeals to our reason is false; that what is, isn't, and that what isn't, most certainly is.

With such a philosophy we may confront the Sphinx.

If we only knew it, at morning it is night; the shadows of night are but the effulgence of day; cheese is bread, bread is gold, and gold is silver, of course. We are nothing but whirls of air; some atoms are dancing a waltz and look like men; some are dancing a gallop and look like flowers; we are all a mad, ecstatic cyclone of nothingness.

We are we, and the universe is you, and everything is us.

There is not such a thing as a pain or an ache, and the old maid that thinks she has a pain, is one with the married woman who thinks she has a baby; and the man that gets up in the night to minister to a colicky child, nurses a delusion.

The husband of a Christian Scientist teacher, lately married, that did not believe in doctors or sickness, called upon a physician one cold, stormy night in January. He was in a great hurry.

"What is the matter?" asked the doctor, sticking his night-cap out at the door.

"Oh," said the man, in an anxious tone, "my wife is very sick, and wants you to come at once."

"She sick?" answered the doctor in surprise; "why, man, she has turned half this town into the belief that there is no such thing as pain."

"But it's different now," replied the man. "We're—that is, you know—well, she's going, or rather, she expects—we've been calculating for some time to have a—a—bab—yes, a chil—a boy or a girl. It's—it will, or would be our first, and we thought you better be around."

"Well, my dear man," said the doctor, "tell your wife that I am sorry she has so far forgotten her calling as to give in to the sin of a fancied pain or two. These twinges that come with such clock-like regularity are nothing but the timed temptations of Satan. Tell her that there is no such thing as pain; that she isn't going to have a baby; that she isn't a woman, but the ghost of Euripides; that she isn't married. Tell her that I am not a doctor, and never was, and that this is one of the loveliest nights in June. Good-night, sir."

A Crushable Button in Intestinal Anastomosis.

R. C. Coffey, in the Medical Sentinel for August, recommends a potato button in intestinal anastomosis.

He claims for its use:

Absolute fixation and accuracy of approximation during the operation.

Nothing protruding outside the intestine to retard the work.

The normal lumen of the bowel is preserved, as the button may be made any size to suit the case.

The button is crushed at the close of the operation and no foreign body is left.

There is no possible chance of peritoneal soiling from intestinal contents after the purse string is in.

A simple, clean surgical wound is made, and no sloughing follows.

The method may be applied to all kinds of anastomosis with equal facility.

Anastomosis of Hollow Viscera with a New Instrument.

M. O'Hara, Jr., in the American Journal of Obstetrics for July, describes a method of performing anastomosis of hollow viscera by means of a new instrument.

The instrument is simply a long slender forceps, which is placed transversely across the bowel, one at the upper border, the other at the lower, of the part to be removed. The customary V shaped piece is taken from the mesentery. The bowel is cut close to the forceps, which are then

brought together and held by a serra-fine clamp. The sutures are then introduced over the blades, starting at the side nearest the lock and carrying them down to the tip. The forceps are reversed and sutures placed on the other side. The forceps are then unclamped and withdrawn, and the opening closed with a single stitch.

Lateral anastomosis may be done in a like manner.

The advantages claimed are rapidity and ease, lessened risk of secondary contraction, the cavity of the bowel is not exposed at any stage of the operation and infection is not so likely.

The method is almost identical with that of La Place, except that O'Hara places the tip of the forceps on a level with the mesenteric attachment.

Anemia Treated with Antistreptococcic Serum

Two cases of anemia treated with serum are reported by W. H. DeWitt in the Cincinnati Lancet-Clinic for July 21st.

The first case was one of pernicious anemia, the number of reds less than 1,000,000, white 4,000, hemoglobin 30 per cent.

Eight injections were given in all; improvement began after the third and continued until the reds numbered 4,960,000, white 5,000, hemoglobin 90 per cent.

The second case was simple anemia, and the improvement was very rapid. Six injections were given three days apart.

These results bear out the theory that anemia, especially the pernicious form, is due to infection through the alimentary tract, particularly the stomach, and in some instances possibly through the mouth and intestinal mucosa.

The Angiotribe.

Hugh M. Taylor and H. P. Newman speak very favorably of the use of the angiotribe in the Journal for August 4th.

Taylor discusses its use in abdominal work, and Newman in major and minor surgery of the female generative organs.

After more than a year's experience, Newman gives the following advice:

It is all important that the instrument itself be of faultless make, and thoroughly tested by a competent mechanic before using. Whatever model is used, the secret of success is in its strength and the accurate adjustment of its blades.

Do not use it upon omental or like fragile tissue.

Avoid handling or disturbing the attenuated stump after removing the clamp.

It is not necessary to cauterize the thin

edges of the stump, except when there are infectious germs to be destroyed.

As there is no oozing from surfaces amputated in this way, no drainage is required.

Compression of 3,000 pounds for a minute or more should be practiced in all very vascular areas.

In softened, edematous conditions, there is the same danger of cutting and breaking of tissue with the angiotribe as with the ordinary ligature.

In applying on pedicles, care should be taken to equally distribute the tissues within the bite of the forceps.

The use of the angiotribe requires as much skill and judgment as other and apparently more complicated surgical procedures.

Bubonic Plague.

The Pacific Medical Journal for July takes issue with the Occidental Medical Times in regard to plague in San Francisco.

The editor of the former journal does not believe that the plague exists because

To bring the *cocco-bacillus pestis* here from the Orient or the Islands, (granting that this micro-organism be the real cause of the disease, notwithstanding Kitasato's recent discovery of a new bacillus,) either by rat, monkey, or human carriers, the disease must of necessity have caused deaths on board ship in transit, as the usual time from exposure to that of death is from two to five days. The first "suspicious" case which died here was a Chinaman who had lived in San Francisco for 16 or 17 years, and no case is known to have been imported.

We do not believe the germs can be carried in any other way than by a living animal or human being. That is, we do not believe the germs of plague could be transported by merchandise. We agree with the authorities that the common carrier of bubonic plague is the rat and the flea. Granting that rats and fleas from the Orient had been infected, it is difficult for us to believe that human beings would not have contracted the disease during the weeks in transit. Granting, for the sake of argument, that these infected rats and fleas did bring the plague to San Francisco Harbor without infecting human beings, it would seem almost miraculous that these particular rats and fleas should swim ashore and find one particular sewer along which to enter a certain particular spot in our particular Chinatown. Of the hundreds of sewers emptying along the water front it would seem strange that no other spot than a few blocks in Chinatown should have become

the home of these rats and fleas. The Latin quarters, the Portuguese quarters and the quarters of the very poor south of Market Street are probably in no better sanitary conditions than Chinatown, and it does seem a little strange to us that a few rats and fleas should not as easily have gone south of Market or into the adjoining blocks of the Portuguese and Latin quarters as into the very center of Chinatown.

Should one case die of the plague in Chinatown with his family and friends around him, it is a moral certainty that most of the exposed people would contract the disease and die. So far no *two deaths* have occurred in the same house from any cause, no two people of the same family, nor any friends of deceased, have died during the supposed existence of the plague in San Francisco for the past three months.

Chinatown has had fewer deaths from all causes for the past three months than during the same period in any previous year.

Bubonic plague is such a virulent, infectious, and contagious disease, that had one genuine case occurred in San Francisco, March 8th, as reported, there certainly would have been hundreds or thousands of deaths from the disease in over three months time.

Blood Clot Following Injury to Head.

W. F. Kuhn, in the Kansas City Medical Record for August, reports a case of blood clot with pachymeningitis interna.

Eight weeks before the patient sustained a severe blow on the right forehead over the frontal eminence. For several days there were no symptoms, but later his mind was affected and all the symptoms seemed psychical. Operation was not advised, as there were no symptoms pointing to injury from the blow.

He was put upon iodide and seemed to improve for a time, but later developed meningitis and died in coma.

Autopsy revealed a large blood clot over the posterior half of superior and middle convolutions, and superior half of anterior ascending convolution of left frontal lobe. A severe pachymeningitis interna was found on the left side and a less severe inflammation on the right.

The autopsy established the uselessness of any operative interference, especially near the point of supposed injury from the blow. The absence of all focal symptoms made it an absolute folly to attempt to locate the seat of a tumor or any other local lesion. That there was some pressure on a frontal lobe was evident, but on which one

and where? Non-operative interference was fully justified by the autopsy.

The question arises, what caused the clot? Was it a *counter-coup* rupturing the superior longitudinal sinus or the ascending frontal artery; or was it a meningeal hemorrhage due to vascular degeneration incident to alcoholic excesses? The condition of dementia seems to date from the reception of the blow on the right side of the forehead. The slow progress of the various symptoms would indicate that the clot was a slow meningeal hemorrhage, the result of a counter-coup. The blow would not have been sufficient to produce such a result except in a condition of vascular degeneration. The absence of focal symptoms can readily be explained by the lack of sufficient pressure, no irritation and no cerebritis.

The Bronchial Glands.

According to the Denver Medical Times for August, J. N. Hall said that the diseases of the bronchial glands have been but little studied, and are generally neglected in our text-books of medicine. English authors have paid much more attention to them than Americans, and it seems probable that the glands in question are more often seriously affected in English children than in those of this country. French and German literature is much more fertile than our own upon this subject,

The anatomy and pathology of the glands was entered into at length. The enormous importance of the glands, as protective agencies against general tuberculous infection, was emphasized. One point not generally appreciated is that most cases of tuberculous meningitis arise from the diseased bronchial glands.

Most of the glands taken even from healthy individuals dying from accident will cause tuberculosis if injected into the guinea-pig, while the mesenteric and cervical glands of the same persons fail to infect.

The great importance of the glands as causes of bronchial obstruction and various obscure chest conditions, dependent upon rupture of abscess of the glands, was pointed out.

The address closed with minute notes as to diagnosis, prognosis and treatment of the various conditions dependent upon the diseases of these glands.

Cannabis Indica.

H. Edwin Lewis, in Merck's Archives for July, gives a study of this drug. The uses of cannabis indica are manifold, but

its efficiency is most marked in diseases directly due to nervous derangement.

In migraine, hemicrania, headache due to eye strain, and the various neuralgias, it may be used with marked success. In the pain of multiple neuritis, locomotor ataxia, or the chest pains of phthisis, it is often very serviceable.

As a hypnotic it is not much.

Useful in the various neuroses accompanying pregnancy and the climacteric.

In dysmenorrhea and profuse menstruation it often gives great relief.

As an aphrodisiac the drug has been overestimated.

In diabetes mellitus it is valuable.

He uses the solid extract in one-fourth to one grain doses.

Conservative Operation on the Ovaries and Tubes.

W. L. Burrage in the American Journal of Obstetrics for August, gives an analysis of 85 cases and comes to the following conclusions after a careful study of the remote results of such operations:

It is advisable to do conservative operations in all cases where the ovaries and tubes are not hopelessly diseased in all parts of their structure, except on patients who are near the menopause, on patients who have pronounced gonorrhea of long standing, and on the rare cases of malignant disease.

When a patient is near the menopause (over 35 years of age) and has ovarian or tubal disease of any considerable degree of severity, it is generally wisest to perform complete removal, with or without hysterectomy according as the uterus also is diseased or not.

In cases of well-marked gonorrhea of long standing, especially if the patient is constantly exposed to reinfection, if both tubes are seriously diseased and closed, total removal with or without hysterectomy is the operation of choice.

In certain cases of this where the patient thoroughly understands the likelihood that another operation may be necessary at some future time, and wishes to take the chances in the hope of preserving the function of menstruation, conservative operation is permissible.

If one tube is patent and healthy in appearance and there is enough healthy ovarian tissue to preserve, a conservative operation ought to be performed even in the presence of gonorrhea.

With present methods of performing resection of the tubes, if both tubes are found

closed at the time of operation subsequent pregnancy is not to be expected.

In severe grades of inflammation of the appendages, irrespective of causation, if the ostium abdominale of one tube is patent the prospect of subsequent pregnancy after the preservation of a portion of ovary is about one in four and a quarter, or $23\frac{1}{2}$ per cent.

In the less severe grades of inflammation under similar conditions of tube and ovary, the prospect of subsequent pregnancy is about one in two and a quarter, or 44 per cent.

In women who have borne children, in both classes, subsequent pregnancy may be expected in 35 per cent, whereas in the previously sterile it may be looked for in only 5 per cent.

If it is necessary to remove both ovaries it is of no advantage to preserve any portion of tubal tissue; but, except under the conditions just enumerated, some ovarian tissue should be preserved in every case.

Cancer of the Stomach and Intestines.

B. Farquhar Curtis, in the Medical Record for August 4th, in speaking of cancer of the stomach says that no absolute rule can be laid down limiting the removal of these tumors, but each case must be judged on its own merit.

He mentions the following indications for operation in suspected malignant disease: The presence of a tumor; dilatation of the stomach; obstructive vomiting; marked chemical changes in the gastric contents even if other symptoms are slight; hematemesis; severe gastric pain.

In cancer of the intestines we may remove the tumor or simply relieve the obstruction.

The operation of intestinal anastomosis has one disadvantage as compared with the artificial anus. In the latter operation it is possible to select a point in the bowel far away from the tumor and not likely to be invaded later by the disease. In intestinal anastomosis the point of anastomosis is apt to be near the diseased part of the bowel, and in a considerable number of cases it becomes involved in the disease later.

Care of Patients During Operations.

In the Medical Record for August 11th, Fenton B. Turck gives some methods for preventing shock and infection.

His experiments show that pathogenic and non-pathogenic bacteria, found on and in the skin before and during surgical operations, may produce infection.

The skin, especially in abdominal operations, is a source of infection that may cause death, though all usual precautions are particularly taken. Susceptibility to infection is produced in cases of lowered vitality and weakened condition; or in cases in which shock is present, from whatever cause, in a mild or severe form.

The present methods yet in use, of towels and laparotomy sheets, do not sufficiently protect the field of operation.

The use of the rubber protector which is made to fit close to the skin more thoroughly prevents the danger of infection from the skin, and also lessens the liability of the skin becoming contaminated from the escape of visceral contents, pus, or other infected material occurring during the operation.

The peritoneum may become infected from the escape of visceral contents or from any infected cavity opened during surgical operations in the abdomen. Infection may result, even after the most careful precautions are taken, notwithstanding the use of gauze and careful packing, now in common use.

When death occurs from supposed 'shock' or 'exhaustion,' especially when the viscera have been exposed to dangers of infection by the escape of visceral contents, the death is probably due more to the infection than 'shock' or 'exhaustion.'

Whenever practicable, the viscera may be drawn through the small openings of the protective rubber shield overlapping the abdominal wound, as described in this paper, and absolute protection to the abdominal cavity is secured.

Exposed viscera may be covered with a rubber hood, kept warm by small rubber hot-water bags, thus preventing contamination as well as lessening susceptibility to infection.

Animals naturally immune to certain bacteria are rendered susceptible by exposure of the viscera to air for one hour or more.

Susceptibility can also be produced in an animal naturally immune, by long manipulation of the abdominal viscera, notwithstanding all ordinary precautions are taken. Visible trauma is not essential.

In animals in which susceptibility is not artificially produced, only slight effects are observed after intraperitoneal inoculation of micro-organisms taken from the skin before surgical operations.

When an animal is rendered susceptible by exposure of the viscera to air, pathogenic and many non-pathogenic micro-organisms inoculated may cause infection followed by death.

Subcutaneous or intravenous infusion of physiological salt solution does not materially render the animal less susceptible, after the exposure and manipulation of the viscera.

When heat at 48 deg. or 50 deg. C. is applied within the abdominal cavity during the time corresponding to the exposure and manipulation of the viscera (about one hour), inoculation by pathogenic or non-pathogenic germs seldom results in infection and death.

If infection does occur, death is delayed, or seems prevented, as a result of the procedure described. Susceptibility to infection is not materially decreased by the external application of heat.

Hot-water bags placed in the abdominal cavity during an operation prevents shock or collapse, and also produce a modified immunity or lessen the susceptibility to infection.

In severe operations, when extreme shock or collapse is present, resuscitation is best accomplished by the application of heat within the stomach and abdominal cavity, by the methods already described.

Change of Climate in the Treatment of Tuberculosis.

Karl von Ruck, in the *Sanitarian* for August, calls attention to the fact that change of climate and climatic treatment are not synonymous terms, but that it is possible to give a patient climatic treatment at his own home.

His position on the subject is formulated as follows:

That climatic change is not a necessity.

That it is advantageous and desirable, as an aid to the general care and management and to other treatment.

That climatic treatment under strict and constant professional supervision at climatic resorts, or at home, deserves better consideration at the hands of the profession than it now receives.

The Climate of North China.

It is rather unhealthy for a foreigner anywhere in China just now, but we are interested in the weather on general principles.

In the *Quarterly Medical Journal* for August, the Rev. Frank B. Turner gives some points on this subject. He speaks only of the Taku, Tientsin and Peking districts.

By the 10th of December a hard frost sets in and in a few days every thing is frozen hard, even the sea itself for a mile or two

from the shore. In spite of the cold the sky is clear and the sun shines brightly in the day time, snow or rain never falls during this period. Dust storms occur at times, immense brown clouds of frozen dust from the Mongolian plains blow in upon everything. The temperature ranges from the freezing point to 9 deg. F. The Chinese do not use fire much, they simply wrap up well.

In March the long frost breaks, and by April mild weather comes with occasional rains.

May and June are fine, balmy and bright, but bring malaria, mosquitoes, diarrhea and dysentery.

July and August are hot and steamy, as there is almost continuous rain, for weeks the temperature is from 90 deg. to 100 deg. F. By September the heat abates, and while the sun is still hot it is possible to keep cool in the shade, and during October and November the winter comes on again.

Chronic Enteritis and Tuberculous Enteritis Treated with Hypodermic Injections of Arsenic.

Louis Kolipinski, in the *Medical News* for August 11th, recommends the hypodermic use of arsenic in these conditions. He uses sodium arsenite in from 1-64 to 1-32 of a grain doses, suspended in 60 minims of normal salt solution. In mild cases this dose should be given once a week; in average cases, twice a week; and if severe, every day or two.

Other medication he says is not necessary unless it be an occasional prescription for the relief of some prominent symptom. Of course the patient must be kept under rigid diet.

It is not claimed that this is the best treatment for chronic enteritis. The therapeutic actions of arsenic are often brilliant, but, with the exception of its effect on chorea, are at times variable and unsuccessful. Its usefulness in chronic enteritis is not always certain. In the colliquative diarrhea of amyloid degeneration, the writer has not had opportunity to try the remedy; in a case of chronic diarrhea due to chronic myocarditis as primary cause he met with failure. He has had some non-successes with patients treated by hypodermic injection. Occasionally the lack of confidence or prejudice of the sick may have been underlying causes. Considering, however, his experience as a whole the conclusions seem to him substantiated that:

1. The arsenical injection is safe, painless and effective.

2. The dose is very small. From one-

sixty-fourth to one-thirty-second of a grain of sodium arsenite is sufficient.

3. One, two or three injections per week will cure the milder cases.

4. Other internal medication is avoided and the patient has no daily routine of dosing.

5. Greater latitude in diet can be allowed without detriment.

Convulsions in Children.

Wm. A. Dickey, in the *Cleveland Medical Gazette* for August, recommends the cold bath instead of the hot, in convulsions of children.

He says that in most cases we find the temperature from 103 to 106 F., and that the indication is for a cold bath if for any. During the paroxysms inhalations of chloroform should be used, but its administration should never be intrusted to one ignorant of its effects.

The stomach tube or an emetic may be used in appropriate cases with good effect. An enema of soapsuds, morphia hypodermically, and calomel are all useful in these cases.

Digitalis in Acute Alcoholism.

Henry P. Loomis, in the *Journal* for August 11th, recommends the use of large doses of digitalis in acute alcoholism.

He reports several cases in which a half ounce of the tincture of digitalis was given every four hours for three doses. It looks somewhat like substituting poisoning by digitalis for poisoning by alcohol, which is only swapping the witch for the devil.

His conclusions are as follows:

The indiscriminate use of large doses, half-ounce, of digitalis in acute alcoholism, is fraught with danger.

The cases in which it should be given are the strong, robust, those in early life, with no complications, and those with violent delirium. In these cases the result will be exceptionally favorable. They become quiet, go to sleep with a certainty and promptness that is obtained by no other methods.

If after three doses no narcotic effect is noted, he does not advise a continuance of the remedy. In the above class of cases it can be used with perfect safety for a limited number of doses.

The failures among his cases were in the chronic alcoholic subjects, in those in middle and advanced life, in the anemic, and in those with bad nutrition.

One fact noted which showed marked results from the treatment was that when the patients recovered and awoke from their

sleep they were in such good condition that they were able to leave the hospital at once. This is an unusual experience, as ordinarily convalescence is delayed for two or three days.

Electrostatic Treatment of Paralysis.

W. B. Snow, in the *Journal of Electro-Therapeutics* for August, says that in all cases of paralysis the nutrition of the parts should be maintained by an agency that will preserve the balance of the nutrition of exercise and the nutrition of restoration that degeneration may be retarded.

Such agents must be searching, potent, and of a character that will induce no chemical or unfavorable alternative action of the tissues.

Electrostatic sparks and currents, having high voltage and infinitesimal quantity or amperage, exercise the parts, promote metabolism, and thereby maintain the parts in the best condition when systematically applied.

When the character of the lesion does not preclude the possibility of recovery, the early treatment will prevent degeneration, hasten recovery, and give excellent final results.

There is no contra-indication at any state of a paralysis for the intelligent administration of electrostatic treatment, because it lessens hyperæmia and congestion, relieves nervous irritation, and tends to restore a normal equilibrium of the system in general and of the parts affected.

Altitude as an Etiological Factor in Insanity.

Charles H. Salier in the *Western Medical Review* for July 16th, says that there is a prevalent belief throughout the Rocky Mountain region that prolonged residence in high altitude favors the development of functional nervous and mental diseases. Seldom indeed does a case of insanity develop in which either high altitude is not alleged as the exciting cause or a removal to sea level is not advised as a therapeutic measure.

After considering this idea he says that he has been unable to discover any good reason for believing that altitudes of from 4,000 to 7,000 feet are to any appreciable extent favorable to the development of functional insanities. As to chronic brain degenerations it is probable that some climatic influence of our high altitudes renders the central nervous system more susceptible to the effects of prolonged mental strain, and more especially to syphilis and alcoholic and venereal excesses.

Bubonic Plague from a Sanitary Stand-point.

Chas. F. Craig in the Pacific Medical Journal for August in speaking on this subject gives some personal precautions to be observed during an epidemic of plague.

Great care should be given to personal cleanliness, both as regards the person and clothing. The hands should always be washed before eating, and the face also, while, if possible, a daily bath should be used. For washing, hot water is just as useful as antiseptic solutions, unless infected material has been handled, when 1-1000 bichloride solution should be used. The mouth should always be rinsed out before eating. Underclothing, all linen, handkerchiefs, etc., should be washed often.

All scratching, punctures, wounds, contusions, or insect bites, should be avoided, as it is through the skin that infection most often takes place. and if such lesions are present they should be thoroughly washed and protected from infection by some covering.

All partly spoiled food should be avoided, and all food which is not thoroughly cooked. Fruit should be stewed and not eaten raw, and especial care should be taken never to eat fruit which has stood uncovered upon stands. All food should be prepared when fresh, and never allowed to stand. Milk and water should be boiled before use.

The greatest cleanliness should be observed in dwelling houses, no dust being allowed to collect, and as little dust made in sweeping as possible. To avoid dust the floors should be cleaned with wet cloths or a mop, and carpets should be sprinkled liberally with water before sweeping.

All insects and vermin should be destroyed as far as possible, especially rats.

Regarding the care of the sick, it may be said that they should always be isolated and attended by only one person beside the physician. All excretions, such as the sputum, urine and feces, should be carefully disinfected by corrosive sublimate, 1-500, or chloride of lime, and especial care should be taken to avoid soiling of the linen. When soiled all linen should be at once boiled. All utensils used by the patient should be boiled after such uses, especially tableware, etc.

Celiotomy for Intestinal Obstruction,

Chas. A. Morton in the Lancet as quoted by the Archives of Pediatrics for August reports a successful case of celiotomy for intestinal obstruction due to persistent Meckel's diverticulum.

The patient was a girl nine years old.

The illness began with headache and vomiting. On the third day of the illness there was pain situated in the umbilical region. The pulse was 100 and the temperature was between 99 deg. and 100 deg. F. On the fourth day there was some general tenderness but the abdominal wall was not rigid. There was a passage of blood or mucus from the bowel. The passage of feces and flatus could not be learned from the history. On opening the abdomen and liberating the distended bowel it was found that the constricting ring into which the bowel had slipped was formed by a persistent Meckel's diverticulum.

The child made a good recovery.

Carbolic Acid Used by Mistake as a Throat Spray.

D. H. Galloway, in the Laryngoscope for August, tells of how he sprayed out a patient's throat with 95 per cent. carbolic acid by mistake.

A small label of carbolic acid had been pasted on the large label of peroxide of hydrogen. About an ounce was poured in the atomizer and used freely before the mistake was discovered.

The patient at first suffered no great inconvenience, but soon began to choke and strangle. Alcohol was sprayed freely on the part and mucilaginous drinks ordered. Patient recovered in a week and the tonsillitis, for which the first treatment was given, had entirely disappeared.

Dipsomania Treated by Suggestion.

J. Milne Bramwell, in the Quarterly Journal of Inebriety for July, says that hypnotism is a powerful agent, which may be applied without danger. Much, however, depends upon certain points.

The patient must be willing to be cured. Difficulties as to this are more frequently encountered in cases of chronic alcoholism than in dipsomania. Even the latter patients, however, sometimes dread treatment, as they fear it may raise an artificial barrier between them and drink, and yet leave them fighting with the craving. As a rule, however, their fears are easily dispelled by means of a little tact and explanation.

Susceptibility to hypnosis is a varying and important factor. Most authorities agree that all, except idiots and those suffering from certain forms of mental disease, can be hypnotized. On the other hand, time and trouble are often requisite and frequently slight hypnosis alone can be induced. Fortunately, deep hypnosis is not

essential to the production of good therapeutic results.

In dipsomania one ought to begin treatment at the commencement of a period of quiescence, and aim at preventing, or at all events, retarding and weakening the next attack. When stimulants are taken continuously the difficulties are greater, but the patient must be helped and encouraged to reduce them as speedily as possible.

The management of the patient during the earlier part of the treatment, before suggestion has taken effect, is important. If possible, he should not be left alone, but always have near him some trustworthy person to whom he can confide his temptations, and turn for aid in overcoming them.

The operator must be persevering and not easily discouraged; many patients, who ultimately do well, relapse more than once during treatment.

A distaste for alcohol ought to be suggested, as well as the abolition of the craving for it. The patient must be made to understand that he can never look forward to being a moderate drinker, and that the only choice before him lies between total abstinence or the gutter.

Even when the craving disappears quickly, the patients ought to be hypnotized regularly for a month. If they can be seen from time to time for the next six months, so much the better and safer.

The object of the treatment is not only to cure the diseased craving, but also to strengthen the will of the patient and help him to combat the temptations of social life. The latter point is important. Some patients forget what they have gone through and, although they have no diseased craving, yield to ordinary temptation. If the patient has not gained the power of controlling himself, the treatment has failed in its object; for self-control, not artificial restraint, is its essential feature.

Extrabuccal Feeding.

C. A. Ewald in the Medical Record for August 18th, discusses rectal feeding by means of nutritive enemata, feeding through the cutaneous surface by means of subcutaneous or intravenous injections of food stuff and feeding after gastrotomy.

He says that extrabuccal feeding does not completely replace feeding by mouth, and is not permanently capable of answering the demands of metabolism. In most cases in which this method exclusively is resorted to a state of malnutrition sets in from the outset. An exception to this rule occurs in those cases of gastric fistula in

which the operation was necessitated by a benign stricture of the œsophagus.

For a short time, in weakened individuals whose metabolism is below normal, it may be possible through extrabuccal feeding to increase the nitrogen conversion and even to cause an accumulation of nitrogenous substance and fat.

The best results are obtained when it is a question of a temporary replacement of the natural feeding per *os*, or when extrabuccal feeding is resorted to as an accessory measure to the former.

Nutritive enemata are to be preferred to the subcutaneous injection of oil. The applicability of the latter lies rather in isolated cases than as a measure adapted to widespread use in practice.

Examination of Sputum for Tubercle Bacilli.

Carl Weidner in Medicine for August recommends the method of Guenther for detection of the tubercle bacilli in sputum. Great stress is laid upon the minutiae of its execution.

1. Spread the sputum upon the cover-glass, as a thin homogeneous layer. This is best done by means of a sterilized platinum wire loop fixed in a glass rod, because it is well suited to pick out the purulent masses from the sputum, and because it is cleaner than the common method of spreading small particles of sputum between two cover-glasses.

2. Dry the sputum thoroughly in the air.

3. Fix it by passing it through a flame three times.

4. Float the cover-glass with the sputum side downward in a watch crystal full of Ehrlich's solution of either anilin gentian violet or anilin fuchsin.

5. Heat over a small flame until the staining fluid begins to boil.

6. Set aside for one minute to prolong the action of the stain.

7. Remove the cover-glass with the forceps and, without washing it in water, place it in a solution composed of 3 parts hydrochloric acid and 97 parts absolute alcohol. Leave in this solution for one minute and rinse well in distilled water. The specimen ought to appear nearly free of all color to the naked eye.

8. Counter-stain in a weak solution of methylene blue for several minutes.

9. Wash in distilled water, dry in the air, and if you want to keep the specimen, follow at once by passing it again through the flame. This is done for the purpose of getting rid of all acid which might have a decolorizing effect latter on; then mount

in xylol balsam and inspect with a good 1-12 oil immersion lens, using open condenser and maximum illumination.

The picture will be as follows: If you use fuchsin you will see the tubercle bacilli as little red rods upon a blue ground. Everything that is red should attract attention. Not everything that is red, however, are tubercle bacilli. We have other substances which may accept this red stain, and we ought to differentiate them. Epithelial scales, hair, fatty crystals, etc., may be affected in this way where a single stain is used; spores of any bacilli may also be stained, as we know, but these have a different shape, and we ought to differentiate each one of these substances from the tubercle bacilli. The latter are arranged singly, or in little bunches, or frequently in a V-shaped arrangement, and they are spread all over the cover-glass. They are slightly curved and often have a beaded appearance, which is so characteristic in active bacilli well prepared. It is of the utmost importance that these directions be followed scrupulously.

Endoscopy and Cystoscopy.

James E. Dedman writes very enthusiastically of the diagnostic value of endoscopy and cystoscopy.

After considering other means of diagnosis that should always be used first to make an accurate diagnosis, we may be compelled to use the endoscope or cystoscope.

The Klotz endoscope, he considers the best, as it has no funnel end. Tubes under 23 French are of little use.

In cystoscopy he says three different types of cystoscopes are necessary to make a thorough inspection of the entire surface of the bladder.

About five ounces of sterile water should be left in the bladder after washing it out. Too much, or too little, water may make quite a good deal of difference.

Exploratory Opening of the Spinal Canal and Cranium.

Miles F. Porter, in the Fort Wayne Medical Journal-Magazine for July, says that opening of the cranial and spinal cavities and exploration of the brain and cord are operations accompanied by slight risk when properly done.

Exploration is absolutely necessary in many cases before a diagnosis can be made.

When necessary to decide between delay and exploratory operation we should remember that delay is often more dangerous

than operation. Other things being equal the earlier the operation is done the better are the prospects of success.

We should do with cranial and spinal injuries and diseases as we do with like conditions in the abdomen, viz.: When in doubt open and examine, with the assurance that the possibilities for good in such a course far outweigh the possibilities for harm

The Evidence of Prostatic Atrophy After Castration.

Castration for prostatic enlargements gets a black eye in an article by Edward L. Keyes in the Medical Record for July 21st. After looking at the subject up one side and down the other he concludes that experiments, whether on man or the lower animals, relating to the normal prostate do not of necessity apply to the enlarged prostate.

He knows of no direct pathological evidence that castration has ever caused atrophy of a hypertrophied prostate.

There is direct pathological evidence that in a few cases castration has failed to cause atrophy of the hypertrophied prostate.

The majority of cases reported thus far have been labelled "cured" or "improved" so soon after operation that many of them are doubtless instances of local depletion.

Clinical evidence of this is afforded by relapses occurring months after the operation.

Of the permanent cures some may well be instances of permanent advantage derived from reduced congestion.

The clinical evidence as to the actual atrophy of the prostate after castration lacks, as yet, its scientific confirmation, and has failed thus far to prove its title to the surgeon's credence.

Fever During the Puerperal State.

Henry E. Tuley, in Obstetrics for July, writes on the significance of a febrile puerperium.

He says that a temperature of 100 F. is all right, but if it exceeds this we should look out for some complication.

He says that there is no such thing as milk fever, whether the milk comes fast or slow.

Among the causes of a rise of temperature during the puerperium he mentions mastitis, autointoxication from the bowels, malaria, typhoid fever, influenza, tuberculosis, scarlet fever, eclampsia and erysipelas. In speaking of malaria he says that

it is often a diagnostic cloak which hides the real septic cause.

So in making any of these diagnoses we should be careful to exclude sepsis, or we may allow our patient to pass into a dangerous condition.

We should emphasize the fact that fever in the puerperium should always be a concern; its causation is not always clear, and the question should be weighed most carefully and deliberately. If we approach these cases with the idea of sepsis as the chief possible cause clearly before us, we shall not err in making a comfortable diagnosis of one of the conditions enumerated in this paper, which will involve great discomfort to the patient.

The Cause of Diabetes.

R. T. Williamson, in Hospital for July 14, from Practitioner of July, in discussing the cause of diabetes, urges several facts pointing to the probability of the whole thing starting from some toxic substance being introduced into the system from the intestinal canal. First he points to the rapidity with which in some cases, especially in young adults or children, the disease runs its course, the patients having been in good health up to the attack, and the onset of the symptoms having been very sudden. Then the tendency which the disease sometimes shows to intermit, and may be to disappear entirely for a time, and the influence which an intercurrent disease, such as phthisis, or of febrile attacks, exercises in holding the symptoms in check have to be remembered. Finally, he says that during the last ten years several papers have been published recording the occurrence of diabetes in both man and wife, although such cases are comparatively rare, they seem to have occurred in a proportion which is certainly greater than can be accounted for by mere coincidence, all of which favours the view that in these cases both man and wife, having been exposed to the same influence, have suffered from the same effect. Coming to experimental evidence, it is well known that a number of drugs will so disturb sugar metabolism as to produce temporary diabetes, so that it is quite in accordance with the facts of the case to suggest the absorption of a toxin as a cause of the disease. The observation, then, that diabetic urine when administered to dogs in large quantity by the mouth, or subcutaneously, produces in them glycosuria is a matter of great interest, especially in view of the fact that non-diabetic urine does not produce this effect, for it seems to show that a diabetic is excreting, and therefore presumably

contains a poisonous substance of some kind. Then to show that this poison comes from the intestinal canal there is the observation made by Topfer that in animals the cutaneous injection of a dialysate of faeces from a diabetic subject produced glycosuria and that the injection of a quantity of the contents of the small intestine of a diabetic patient under the skin of a rabbit did the same, while if the intestinal contents of a healthy man were employed no such result followed. Recently, again, Töpfer has shown that glycosuria can be produced in dogs by injecting into the small intestine, or even into the stomach, a portion of the intestinal contents taken from a diabetic patient, while control experiments from non-diabetic cases proved negative. The results of all these experiments is to suggest very strongly that many cases of diabetes may be caused by the absorption from the intestines of some toxic product the result of the action of micro-organisms on their contents.

Borax and Formaldehyde as Preservatives of Food.

W. D. Halliburton, in the British Medical Journal for July 7, as quoted by the Medical Age for August 10, says that an antiseptic is inimical to the life of the organisms that cause putrefaction. It cannot therefore, be harmless to the vital processes in the higher animals. Numerous clinical observations have been recorded which show that dyspeptic and other troubles follow the use of foods which have been treated with commonly employed preservatives like borax. Even if, as in the case of boric acid or borax, the poison is not cumulative, the continuous passage of foreign substances through the kidneys cannot be beneficial to those organs. The writer says that the very efficiency of formaldehyde renders it particularly objectionable. Aqueous solutions of formaldehyde are very irritating to the skin, and if the drug is introduced into an animal by intravenous injection, the red blood-corpuscles are disintegrated, respiration is disturbed and may stop. Convulsions and coma may also supervene. Formaldehyde, used in very weak solutions, has a deleterious effect on the gastric digestion of proteids, on the pancreatic digestion of proteids, and the pancreatic digestion of starch, and on the curdling action of rennet.

Diphtheria of the Vulva.

E. E. Ware, in the Lancet for February 10th, reports a case of diphtheria of the vulva as quoted in the Journal of Laryngology for August.

The diagnosis of diphtheria is always much facilitated by the identification of the bacillus, and when also paralysis supervenes the diagnosis is certain. It is a little remarkable in this case that, although the diphtheritic patch was situated on the vulva, the muscles first paralyzed were those of the palate, but the same combination has been noticed before. The explanation is probably to be found in the fact that even slight paresis of the palate muscles would be noticeable long before the same amount of weakness in the leg muscles would become evident. For a similar reason strabismus is often a very early sign of diphtheria. The local antiseptic treatment of diphtheritic patches on external parts of the body is always advisable, though when the palate is affected the harm which the child suffers from fear and struggling probably outweighs the benefit which might result from the antiseptics. The antiseptic employed, however, should not be very strong, otherwise the damage to the tissues may weaken their power of resistance.

In the case recorded white patches were found on the vulva, and the Klebs-Löffler bacillus was isolated. Under 2,000 units of anti-diphtheritic serum, the symptoms quickly abated, but were followed by paralysis of the soft palate, and regurgitation of fluids through the nose. Recovery was complete. There is no doubt that this was a case of true diphtheria of the vulva, for even had there been no bacteriological examination, the onset of paralysis of the soft palate may be taken as sufficient proof. The symptoms were misleading, and pointed to the probability of stone in the bladder, this being the commonest cause of severe pain on micturition in a child, and it was thought that the local redness was due to handling in consequence of reflex irritation.

Fractures of the Skull.

Angus McLean, in the Medical Age for August 10th, reports several cases of fractures of the vertex and lateral regions of the skull.

His experience in these cases lead him to offer the following conclusions.

That it is the injury to the endocranial contents and not the bone that must be considered.

That there may be contusion of the brain without fracture of the skull.

That there may be intracranial hemorrhage in simple non-depressed fracture of the cranium.

That severe intracranial lesions may be present when there are very slight external symptoms.

Gangrene Complicated by Glycosuria.

Wallace in the Lancet as quoted by the Boston Medical and Surgical Journal for August 9th, reviews a number of cases of gangrene with glycosuria and arrives at the following conclusions.

That it yet remains to be proven that true gangrene (excluding death from acute specific processes which may occur in any subjects and at any age) occurs in diabetic patients unaccompanied by such arterial disease as would of itself produce the gangrene.

That the glycosuria may or may not precede the gangrene, but is not usually accompanied by other signs of diabetes.

That septic wounds may produce a glycosuria which vanishes when the septic process is removed.

That individuals suffering from septic processes are often on the borderland of glycosuria.

That gangrene may aggravate a pre-existing glycosuria.

That the arterial disease is sometimes that which accompanies, or is produced by, chronic renal disease.

That it is yet to be proved that neuritis can produce any gangrene comparable to that of the so-called diabetic gangrene.

That the best chance of recovery is offered by removal of the limb near the trunk and that this measure should be undertaken before the patient is reduced by septic absorption.

That the presence of glycosuria may be an indication, instead of a contraindication, for operation.

Glaucoma.

Two frequent causes of blindness are cataract and glaucoma, says Mary E. Beall in the Journal of Ophthalmology for April.

Some of the symptoms are, increase of tension, cupping of the optic disk, contraction of the visual field, pain, impairment of accommodation and increasing presbyopia.

As to treatment eserine is frequently of service, iridectomy reduces the tension and the earlier it is performed the better. In the hemorrhagic form operation is contraindicated.

She says that excision of the superior cervical ganglion is a valuable procedure in glaucoma and is more valuable in glaucoma simplex than in inflammatory glaucoma.

In inflammatory glaucoma on which iridectomy has been done without benefit, this operation should be tried. In cases of glaucoma absolutum with pain, sympathetomy is to be tried before resorting to any

operation upon the eyeball. The essential lesson to be drawn from a review of this whole subject is that operative procedures are demanded in these cases and are the only means by which a cure can be accomplished. In this affliction remedies will not avail. It is a mechanical condition and must be removed by mechanical means.

Gynecological Instruments.

In the Journal of Surgical Technology for July, Augustin H. Goelet describes an aseptic minor gynecological case made under his directions and containing all instruments needed for such work, and in addition a clinical air-cushion, a portable irrigator reservoir with vulva shield and vaginal nozzle, and leg-holder. This case, which fits into an outside leather bag which holds also the air-cushion, reservoir, and leg-holder, contains two enameled basins, fitted together with their concavities facing each other. The instruments are arranged upon three metallic trays. There are:

- Four dull uterine curettes.
- One sharp curette.
- One combination dressing forceps and placental forceps.
- One angular tenaculum forceps.
- Two uterine irrigators, one for operating and one for clinical work.
- One pair pointed, curved uterine scissors.
- Two broad ligament clamps.
- One needle-holder forceps.
- One uterine dilator.
- One razor.
- One scalpel.
- One vaginal speculum.
- One bottle for antiseptic soap (Synol), for sterilizing the hands and other lubricant.

- Two jars for gauze and cotton.
- One iodoform or Markasol duster.
- One tube of catgut ligatures assorted sizes.

- One tube of silk ligatures, two sizes.
- One metallic needle-case, with one dozen assorted needles.

The basins which serve as a container for the instruments are to be used as a receptacle for the instruments in solution during operation. The instruments required for any given operation are selected and placed in the basin, which is half filled with an antiseptic solution.

In selecting these instruments, the effort was made to discard all that were useless and to retain only those that were absolutely necessary. It is not contended that the case contains everything necessary for all forms of gynecological work, but such as would be necessary for minor gynecological

examinations and minor gynecological operations, and is intended for the general practitioner and for the specialist as well, who may be called to a distance in the country.

Concluding, the author said that the patient must be impressed with the importance of cleanliness in every detail. He thought that those naturally clean would appreciate the physician's efforts in this direction, and to those who were not, it served as a good example. He thought it would be admitted that the confidence of the patient was necessary for successful treatment, and that could not be gained by incompetent and imperfect methods.

Gallstones.

Dudley P. Allen in the Cleveland Journal of Medicine for August gives us his idea on gallstones and emphasizes the necessity for their early recognition and removal.

He reports ten cases and closes with three propositions.

1. That in cases of continued distress in the epigastrium, when a physician skilled in modern methods of investigation, both clinical and physical, can make no positive diagnosis and give no relief, an exploratory operation is advisable. How it is to be completed must depend upon what is found.

2. That operation under such conditions frequently results in the removal of gallstones or the setting free of adhesions, and entirely relieving the patient's suffering.

3. That such operations should not be too long delayed, since the formation of dense adhesions, such as are found not infrequently, may greatly enhance the difficulty of operating and endanger the life of the patient.

Hysteria in Boys and Youths.

Arthur Hall in the Quarterly Medical Journal for August has an interesting paper on hysteria in the male side of the house.

He reports several cases, all being in boys and youths. All were diagnosed at some point or other as cases of organic nervous disease, in one simulating cerebellar tumor, in another cerebral injury, cerebral tumor, meningitis, Jacksonian Epilepsy, and lightning stroke. They were all, sooner or later, discovered to be not organic nervous disease but merely a simulation of it.

He concludes that hysteria in boys is not so common as we are apt to think, and is not so readily recognised as in girls. The children are often bright and intelligent,

and the somewhat spoiled pets of the family. An enquiry will often show that unhappiness in their surroundings, either at school or at their work, is the primary cause, and some slight illness or injury the immediate starting point. The diagnosis of their true condition is sometimes quite easy, sometimes very difficult. Even if simple it is often wise to keep it to yourself, provided you let the patient know that you know. If you tell the parents just what you think they are not always grateful; it is not gratifying to hear that a child has been making a fool of you, or that it has a highly unstable nervous system. Lastly, the child that has done it once will do it again as soon as your back is turned, and this further result is usually displayed to you as convincing proof of the feebleness of your diagnosis.

The most striking difference between the hysterical boy and the hysterical girl is, that the former does it much more purposely, at least it appears so. The difference is partly due to the difference in surrounding of the two. The boy has to live amongst boys and knows how his fellows would tease him for any "girlish" tricks, hence he dreads discovery and "plays the game" with greater thoroughness!

Hysteria.

G. Zada Higgins in the *Woman's Journal* for July discusses this subject.

She says that the most important factor in the treatment of hysteria is the mental treatment and the most important measure is the isolation of the patient. She should be placed where she will not be surrounded by sympathetic friends; where her life will be a regular one; where some occupation may be given which will engross her attention, interest her mind and call into play her physical activities. There is a special value in the Wier Mitchell treatment which consists of isolation, rest, diet, massage and electricity. An essential element in the treatment is an intelligent nurse. In less severe cases, a partial rest cure in which the patient is separated from her family but is not placed under such severe restrictions may be all that is needed. In the case of children, removal from the home is often advisable, and the discipline of a well conducted school is a most excellent measure. Mechanical means are often used, such as hydrotherapy, electricity, massage, and exercise.

In hydrotherapy, the douche or jet to the back, the shower and cold plunge are most efficacious.

In the electric treatment, the static and faradic current give the best results. The static sparks relieve contractures and lessen or remove the aesthesias. Massage promotes nutrition and has a sedative effect in many cases.

Exercise is of extreme value, bicycle riding, playing tennis and horseback riding are useful.

Diet. At first may consist of milk 4 oz. every two hours. Skimmed milk is best and may be diluted with soda water or barley water, and, if necessary, peptonized. After a week or ten days the diet is increased. The milk is kept up. A chop is given at mid-day, a cup of coffee or cocoa with toast or bread and butter or biscuit with the milk.

The drugs recommended are valerianate of zinc, turpentine, assafoetida, tincture of sumbul, iron and the bromides. For children a capsule containing 2 grs. of valerianate of zinc and 1 gr. of quinine sulfate is often efficacious.

In hysterical convulsions, the efficient measure is the administration of an emetic. The best is $\frac{1}{4}$ gr. of apomorphin given hypodermatically. Give aromatic spirits of ammonia or compound spirits of ether for stimulative effect.

Hydrotherapy in Pneumonia.

According to Simon Baruch in the *Medical Record* for August 4th, the indications to be met in the treatment of pneumonia are:

(1) To fortify the nervous system; (2) to sustain the heart, whose integrity is of vital import in overcoming the local lesions and in removing inflammatory products by a vigorous circulation; (3) to strive for elimination of noxious products arising from the life and death of the diplococcus; (4) to render the patient comfortable by reducing high temperature, deepening inspiration, and producing sleep.

He says that judicious hydrotherapy in pneumonia, while not a direct curative agent, fulfils all therapeutic indications, efficiently forestalling or controlling all the depreciating elements of the disease.

Resolution is unaffected by this treatment.

Hernia in Children.

In the *American Journal of Obstetrics* for August, Edward A. Balloch speaks very favorably of operative treatment of hernia in children.

*After a careful consideration of the subject he concludes that hernia is a not infrequent condition in children.

Of the forms of hernia, the umbilical is generally cured without operation, the femoral never, and the inguinal in from 70 to 80 per cent. of cases.

In view of the serious handicap in the battle of life caused by a hernia, it is justifiable and proper to recommend an operation for the radical cure in children who have faithfully worn a truss for two years without benefit or in those cases where a truss cannot be worn.

The mortality from operation is less than would result from the accidents attending hernia does no operation done.

Hypospadias.

Ferd. C. Valentine, in the Medical Record for July 28th, describes a case of penile hypospadias treated by Beck's method with complete success.

He describes the steps of the operation as follows:

An incision was carried from the centre of the abnormal urethral opening, through the skin, to the posterior third of the pendulous portion. At the upper end of this incision another was made through the skin, encircling the lower third of the neck of the penis, immediately below the coronary sulcus. The skin-flaps so obtained were dissected back to expose the lower third of the penis. Then the urethra, together with its corpus cavernosum, was dissected from its bed between the corpora cavernosa penis. A narrow, straight bistoury was then thrust through the glans from below upward and well behind the sulcus which normally would have been the fossa, making a new meatus about a quarter of an inch behind the top-most angle of this sulcus. The point of emergence of the knife was enlarged by turning it to the right and the left, making an incision at each side.

After the knife was withdrawn, a long, narrow forceps was passed from above through the channel and the urethra grasped.

Owing to the longitudinal extensibility of the urethra, first described by Beck, it was rather easy to draw the freed end of the urethra through the channel perforating the glans and to attach its opening by means of four sutures to the new meatus. In so doing the glans was somewhat crushed forward, thus obliterating the deep sulcus which had occupied the place of the fossa navicularis. The para-urethral fistulæ were disregarded during the operating.

After attaching the end of the urethra, as before described, the flaps beneath the glans were sutured into their former position.

On the third night after the operation,

the patient had a seminal emission, during which one of the stitches at the meatus was torn out of the tissues. Another was substituted for it and the healing thereafter was eventless.

The site of the incisions was at first infiltrated, as would naturally be expected. The consequence was that erections were incurvated at an angle formed by the glans and the penis. This infiltration gradually yielded to dilatations of the anterior third of the urethra, so that now, two months after operation, the patient reports his erections as entirely painless and with not enough incurvation remaining to prevent intromission in coitus.

The para-urethral fistulæ, which were disregarded during the operation, closed spontaneously. No vestige of them is now visible. The mental depression of the patient, due to the continued consciousness of deformity, has also disappeared.

The Influence of Alcohol.

N. S. Davis in the Quarterly Journal of Inebriety for July gives the history of experimental investigations, concerning the influence of alcohol and alcoholic drinks on the functions and structures of the living body, by American investigators.

These experiments, which have been conducted in this country during the past 50 years, are sufficient to demonstrate, when correctly interpreted, that ethyl alcohol does not belong, in physiologic influence, to the same class as starch, sugar, and fat. Instead of being digested, assimilated, and converted into natural elements of the blood and tissues, it enters the blood and circulates through every part as alcohol, the same as ether, chloroform, morphine, and other drugs; 2d, that it diminishes animal temperature by diminishing the activity of natural metabolism generally, and by lessening the force and efficiency of the circulation; 3d, that it lessens the functions of all nerve structures, both sensory and transmitting, and thereby diminishes the acuteness of the special senses and the activity of mental processes in direct proportion to the quantity of alcohol present; 4th, that it impairs the corpuscular elements of the blood, lessens the activity of leucocytes, and favors tissue degeneration in the direction of fatty, fibroid, and sclerotic changes; 5th, that it lessens every force, or energy known in a living body, namely, muscular force, nerve force, mental force, heat force, and vital or protoplasmic force, both animal and vegetable.

Laryngeal Cancer.

In a paper read before the International Congress, as reported by the St. Louis Medical Review for August 11th, Moritz Schmidt said that cancer of the larynx presents almost always at the commencement and during the course of the disease the character of a tumor in different forms.

Cancer which arises from the deeper tissues of the larynx gives often origin to true papillomata of the surface of the mucous membrane, and often resembles perichondritis in the course of the disease.

Cancer of the ventricle of Morgagni presents very frequently the laryngoscopic picture of internal perichondritis.

In rare cases the cancer begins in the lower and posterior part of the cricoid and shows its presence only by a paralysis of the recurrent.

To exclude syphilis, it is only necessary to give daily doses of three grams of potassium iodid for two weeks.

A positive diagnosis can be made by microscopic examination of a piece of the growth. For this purpose the double curette, cutting from above downward is preferable.

A positive result alone is decisive.

Measles and Small Pox.

In the New Orleans Medical and Surgical Journal for August, Otto Lerch discusses the close relationship existing between measles, chicken pox and small pox.

He says that it seems that small pox has a tendency to spread and become malignant when an epidemic of measles prevails.

The rash of measles preceding small pox is noticed especially at these times. Black measles and the hemorrhagic form of small pox are reported. We have seen that it seems probable, at least, that the conditions favoring the growth of one of these diseases favor also the growth and spread of the other.

We have further seen that they do occur in the same individual at the same time and run their usual course, and that the rash of measles preceding small pox is especially observed during times when both diseases are epidemic, and as small pox spreads and becomes malignant, it does not seem far-fetched to suggest that this rash really is a symptom of measles complicating small pox and causing its malignancy and spread.

Though this proposition, of course, can not be proven until bacteriologists have settled the question, it seems wise, meantime, to act upon the suggestion and to isolate and treat measles as we treat and isolate small-pox, or any of the more dreaded

acute, infectious diseases, with the greatest care, even when cases of small pox are known to exist in the community.

People are not generally aware of the fact that measles is a dangerous disease in itself; one of most dangerous with which a child under five years can be attacked.

Massage in Disease.

E. H. Judkins, in the Journal of Medicine and Science for July, writes of the good effect of massage in fractures, in heart disease, in various nervous troubles, and in drug habits.

The use of massage in heart disease, according to Oertel, is based upon the rest afforded to the overstrained or enfeebled heart by the adoption of the recumbent position for a time.

The aid given to the circulation by the mechanical centripetal pressure exercised on the limbs and trunks by massage.

The more rapid oxygenation induced by the increased circulation and diminution of peripheral resistance by the same means.

The improvement in general nutrition, the elimination of waste products, and the increased metabolism induced by the massage, passive and active exercise in and out of doors.

The careful preparation and selection of suitable food, coupled with the aid to digestion afforded by abdominal massage and exercises acting directly on the walls of the abdomen, and exercising pressure on its contents.

The substitution of regular, graduated, assisted and resisted movements for the spasmodic and ill-regulated exercise taken by patients suffering from cardiac functional disturbance with or without organic lesion.

Rossander, a Stockholm surgeon says that "about one-third of the people who come there for treatment by massage are suffering from some form of heart disease." The results, he adds, are very good, and every reason to be satisfactory, for he has seen every symptom of fatty degeneration entirely removed, and valvular diseases so much alleviated that the patients ceased to suffer even when the anatomical signs have remained unaltered.

Myomectomy per Vaginum.

J. Riddle Goffe, in the Journal for August 4th, recommends the vaginal route in myomectomy.

He says that the superiority of the vaginal in meeting this condition is the same as that which attaches to all vaginal work;

the dangers are less, incomparably less; the convalescence is smoother and simpler, the patient being relieved of the annoyance of stitches, adhesive plaster, bandages and dressings; there is no visible scar to constantly remind her of her experiences, and above all there is no danger of hernia. The question arises: what shall be the upper limit to the size of fibroids that can be dealt with in this way? Experience and facility of operation on the part of the operator can alone determine this question, although the location of the tumor plays a large part in its solution. The traumatism, so far as the patient is concerned, is of so slight a character, that even if the effort in this direction must be abandoned and the abdominal incision made, very little detriment attaches to it, except the loss of time. After the incisions are made, opportunity is afforded to decide whether a myomectomy or a hysterectomy is indicated; if the latter, all the steps already taken are essential to the procedure and no time is lost.

Management of Face Presentations.

Malcolm McLean, in the Medical News for July 28, describes a method of dealing with face presentations. It may be described in a word as version by the vertex within the pelvis, a direct conversion by flexion of a face presentation into a normal vertex position.

The patient being under full chloroform anesthesia, the hand is passed carefully in the vulva, with the outside hand seizing the body of the child. In the entire absence of uterine contraction the chest is pushed as much away from the pelvis brim as possible from the point toward which the chin is pointing in the direction of the occiput, that is, pushing obliquely from behind forward. At the same time the fingers of the vaginal hand are pushed up alongside of the head in one or other of the oblique diameters of the pelvis, so that they can reach the suboccipital portion of the head. The thumb at the moment steadies the brow, and, with a slight lifting motion imparted to the whole head, it is caused to rotate on its axis as described, the chin passing upward above the sacro-ischiatic notch as the occiput is drawn down below the pubis. Flexion may be considerably hastened by pressing down the occiput by the outside hand as soon as the face is dislodged from its position.

No Excuse for not Having License.

The Journal of the American Medical Association for July 28th, says that the

defense to the Mississippi case of Bahn vs. Lowry, an action brought to recover for professional services, was that the plaintiff had not been examined and had not obtained the license to practice in that State. At the trial, he testified that by profession he was a physician; that he had practiced medicine seven years; that he was a graduate of Tulane University, and of the Charity Hospital of New Orleans, La.; that he had applied for and received a temporary license from the Mississippi State Board of Health, and that he did not go before the Board of Examiners at the meeting held just prior to the expiration of such license because he was sick. But, even under such circumstances, the Supreme Court of Mississippi holds that he could not maintain an action for professional services without the license required by law. That he was a graduate of Tulane University, and a skilled physician, it says, was not to the purpose; that he was disabled by sickness from obtaining a permanent license, which, doubtless he would have done, if he had been before the board, was his misfortune. Looking back, it seems that it would have been a reasonable and wise provision of law that it should have authorized the Board of Health to extend a temporary license for inability to attend a meeting of the board on account of sickness or other adequate cause. But, after saying so much, the court adds, it is for the Legislature to insert such provision, and not for the court to ingraft it.

Nasal Diphtheria Complicated by Broncho-Pneumonia.

A case of nasal diphtheria complicated by broncho-pneumonia is reported by Samuel McC. Hamil, in Pediatrics for August 15th.

The patient was a child of seven years. The Klebs-Löffler bacillus was found in great abundance in the nasal culture and in moderate quantity in the pharyngeal secretion. Antitoxin was given, but with no immediate improvement, the child grew gradually worse, but reacted and recovered later.

The special interest attached to this case is the presence of a mild diphtheritic rhinitis, which apparently existed for several days without giving rise to any general symptoms of note, and the final recovery from the prolonged, violent, migrating pneumonia. It seems probable that the pneumonic process was dependent upon the diphtheria, although there was no evidence of pharyngeal or laryngeal involvement. Broncho-pneumonia secondary to diphthe-

ria, limited to the nasal cavities, is rather uncommon. It is much more likely to follow the laryngeal forms. There were no paralyses nor after-effects following this attack. As has been expressed above, the convalescence was unusually rapid.

Nasal diphtheria is evidently much less contagious than the pharyngeal or laryngeal form. In this particular case the child had been taking care of her infant sister, holding her in her arms and frequently kissing her up to the time of the development of her pulmonary symptoms. The disease was not transmitted, notwithstanding the fact that prophylactic measures were not resorted to.

Rubber Gloves.

Augustin H. Goelet, in speaking of the technique of surgical gynecology in the *International Journal of Surgery* for August, says that there is a great objection to the use of rubber gloves. They render manipulations more awkward and the operator is necessarily slower. They are always either sticky or slippery. To shorten the time consumed in operating is often as important as sterilization of the hands. If gloves are considered necessary he thinks it more important that they should be worn by the nurse and assistants, as they are less apt to be as thorough in their preparation as the operator.

Naso-Pharyngeal Disease.

Francis Huber, in the *Archives of Pediatrics* for August, gives a clinical study of naso-pharyngeal disease in pediatric practice.

He says that the removal of the lymphoid hypertrophies in the naso- and oro-pharynx, with the cure of the associated naso-pharyngeal catarrh, will restore the patency and permeability of the nose. If done early, many local pathological changes may be avoided.

The general health will be more or less improved.

The mental faculties and general intelligence will be improved.

Defects in speech and in hearing due to nasal troubles will disappear.

Deafmutism may be relieved.

The functions of taste and smell will be restored.

Reflex neurosis of various kinds will be modified or cured.

Nasal and supposed pulmonary hemorrhages will disappear.

Thoracic deformities will be relieved or cured.

The tendency to acute rhinitis, pharyn-

gitis, laryngitis, bronchitis and pneumonia becomes less and less with the restoration of normal respiration.

The dangers attending the presence of enlarged cervical lymph nodes will be avoided.

The invasion of various infectious diseases is less likely when the nasal mucous membrane is in a healthy state.

The danger of meningeal infection from the naso-pharynx will be lessened.

Ear complications in general, and particularly those incidental to the infectious diseases, will be avoided or rendered less dangerous.

Sea Water as an Organic Medium.

M. Rene Quinton read a paper on this subject before the Congress of Medicine in Paris.

He sets out to show that animal life first began in the sea and that in spite of all the evolution which has taken place, every organism is still more or less of the sea.

In one of his experiments he bled a dog to the last drop and then reinjected sea water to the amount of blood lost. The next day the animal was running about and in a few days had quite recovered.

He concludes then that sea water is an organic medium and that it contains new elements of the greatest value to the living organism.

This explains to some extent why children are so fond of playing in the water, it is a kind of reversion to original type. As a boy we could spend the whole day obstructing the flow of (damning up we called it) a branch and then rolling around in it until we were all mud from head to foot.

And so sea bathing is attractive, not only because of certain girls who bath, but it is our old forgotten home when we were but a loose bit of protoplasm floating around in the life-giving water.

Ocular Manifestations in Diabetes Mellitus.

According to the Medical Record for July 21st, L. A. W. Alleman, in discussing this subject, said that ocular lesions were more frequently found in the chronic cases with mild general disturbance. Paralysis of the extra-ocular muscles in both mild and severe cases of diabetes, and in persons unaware of the existence of any serious disorder, were not uncommon. Any of the extra-ocular muscles might be involved. Paralysis of accommodation was perhaps the most common of the ocular manifestations of diabetes, and occurred quite early.

The paralysis was often complete, so that the patients would observe perhaps only increased difficulty in reading. Some authors claimed that there was a true diabetic cataract, while others contended that the changes in the lens were no more common in diabetics than in others of the same age. But the unexplained occurrence of juvenile cataract required an examination of the urine in addition to the physical examination. Hirschberg believed that there was a true, distinctive diabetic retinitis, and the speaker was disposed to agree with him, though this view was not accepted by many. A diabetic retinitis might take on a renal character when disease of the kidney developed in a diabetic. Retinal hemorrhages, with or without other retinal changes, were always suggestive of diabetes, particularly the small, punctate hemorrhages. They were always associated with conjunctival hemorrhages. Retinal changes were always present in a case of diabetes which had existed more than ten or twelve years. While this was always an unfavorable symptom, it did not necessarily indicate an immediate termination of the disease. Iritis of a severe type was often met with in diabetes.

Prognosis in Cardiac Affections.

J. J. Morrissey, in the *International Medical Magazine* for August, says that when a heart murmur is discovered, do not give a gloomy prognosis upon that simple fact alone; consider the condition of the cardiac walls, the probable length of time the lesion has existed, the presence of dilatation or hypertrophy, or both combined. The occupation and temperament of the patient are very essential factors in the prognosis. Each individual is a law unto himself, and though certain general principles may be established as a basis upon which to build a working prognosis, remember we have no real means of recognizing the strength of the individual heart except its power of resistance against the poisonous effects of alcohol and tobacco, or the inroads of the acute or chronic diseases, or the stress of laborious occupations, or the debilitating influences of prolonged exposure. The diagnosis should be complete, the prognosis tentative. Or, as a distinguished English colleague has well said: "Give your prognosis on the best suppositions; treat your patient on the worst" (Allbutt.)

Remember that murmurs do not invariably mean endocarditis, and a prognosis based simply on the presence of a murmur would be rank injustice to the patient, and

demonstrate incapacity upon the part of the physician. As a skilled observer has well said: "With an apex beat in the normal situation, and regular in rhythm, the auscultatory phenomena may be practically disregarded.

To those of us who are interested in life insurance work, this is of great importance. We wish to be just to the applicant, and, at the same time, do our duty toward the company. The fact that a man has a murmur at the apex, of which he is entirely unconscious, whose heart is doing its work thoroughly despite the existence of the lesion, whose occupation is not of an adversely laborious character, who has passed that period of life when acute rheumatic infection is liable to stimulate into fresh and renewed activity the latent inflammatory products of an ancient endocarditis, should be factors to guide our judgment as to the probabilities of the future and prompt us in recommending for him a policy commensurate with the degree of cardiac inefficiency.

It should not be forgotten, in this connection, that a presystolic murmur does not always indicate the most serious of all lesion, viz: a mitral stenosis, nor has a so-called musical apex murmur any particular significance in prognosis, indicating, as it frequently does, the passage of a stream of blood through a small aperture in the segment of a valve.

From the standpoint of longevity, aortic stenosis is a favorable lesion, and the writer must differ from some authors who state that it appears for the most part after middle life. It is found in that period when a man should be at the highest point of physical capacity, between thirty and fifty. It is true that it is frequently present as part of a general decay, and then develops in consequence of atheromatous changes taking place throughout the system, but it exists more frequently than has hitherto been suspected without such pathologic manifestations being present. Do not inform a young man between eighteen and twenty-five that he has heart disease, because you discover some hypertrophy, with no complication, the result in most instances of active exercise. The writer knows of one individual whose heart is "athletic," a splendid specimen of manhood, whose existence was embittered by the thought of heart disease communicated by a careless and injudicious physician. In this condition, it is, of course, understood that a careful consideration will be given to the large number of causes independently of diseases within the heart itself, that may produce hypertrophy, for example, that typical enlarge-

ment of the heart coexisting with an interstitial nephritis.

Never hesitate to ask a patient to return for further observation, as the condition then may be entirely different from the first examination. There are more snap "diagnosis" made in the realm of cardiac affections, than in the study of diseases in any other portion of the body.

Of two hundred and fifty-five cases of cardiac disease treated in the writer's clinics at St. Joseph's Hospital, in the outdoor department of St. Vincent's Hospital and at the West Side German Dispensary of the New York School of Clinical Medicine, as well as in private practice, he found of the aortic lesions: aortic insufficiency, 18; aortic insufficiency and stenosis, 45; aortic stenosis, 6; mitral lesions: mitral insufficiency, 95; mitral insufficiency and stenosis, 74; mitral stenosis, 14; cardiac degeneration (fatty), 2; pulmonary constriction, 1.

Raw Meat in Tuberculosis.

M. A. Sicard, in *La Presse Medicale* for June 13th, as quoted by *Treatment* for July, says that it has for some time been recognized clinically that the ingestion of raw meat is useful in tuberculosis, and especially in consumption. Experimental investigations on animals corroborate the clinical observations. Introduced as a method of treatment by Weiss, of St. Petersburg, the good effects of feeding on raw meat in cases of consumption have been tested by various observers whom Sicard quotes. He then refers to the laboratory experiments of MM. Richet and Hericourt, which gave most positive results. These authors inoculated with tubercle some dogs, a certain number of which were kept as controls, whilst the others were fed on raw meat. The dogs of the first group all succumbed to tuberculosis in from four to five weeks. Those of the second group, on the contrary, survived for the much longer period of about 300 days, and a certain number of them remained well, one for two years and a half, others for a year and seven months. Cooked meat had no such effect in preventing the onset and progress of tuberculosis.

The Parasitic Origin of Eczema.

Jadassohn, in the *St. Louis Medical Review* for August 18th, discusses the parasitic origin of eczema.

He says that in the large group of common eczemas there are lesions in which, by the aid of methods in use, one cannot discover any micro-organism, or at least in a

manner by which one could attribute to them any pathologic role whatever. In these forms we must admit as etiologic factors a local and a general predisposition, which is very little explained by science and depends sometimes upon well-known morbid states and mechanical and chemical irritation. Second, in this process, as in many other diseases of the skin, we can very often determine an ordinary micro-organic invasion, which is found upon the integument of man and in the immediate environment (staphylococcus and streptococcus). The result of this invasion is dependent upon the degree of virulence of the microbe, upon the local and general predisposition of the subject, and upon the nature of the original process. There result alterations which constitute a long series of very different reactions of the skin, from a slight irritation to a marked impetiginization, from the most evanescent lesion to a grave and chronic eczema (the ordinary secondary infections of the skin are included under true eczema, under artificial dermatitides, parasitic dermatitides, etc.) Third, these ordinary infections can be produced idiopathically without the pre-existence of a recognizable morbid process. Their development and degree depend equally upon the nature of the soil (ordinary primary infections of the skin).

Prolapsus Ani in Children.

Samuel G. Gant, in the *International Medical Magazine* for August, says that prolapsus ani in children will occasionally get better as the child grows older. As a rule, the reverse is the case. Many, however, can be cured without an operation by palliative measures. The essential feature of the palliative treatment consists in keeping the child in the recumbent posture during defecation, thus counteracting the force of the abdominal muscles. Frequent enemmas of cold astringent solutions are valuable, such as alum, zinc, lead, infusions of black oak bark, etc. After each action a firm pad should be placed over the anus and the buttocks should be strapped together by adhesive strips. A pre-existing diarrhea, constipation or cough must be relieved, otherwise the above treatment will fail. If the remedies named do not cure the patient, operation should be resorted to. The operation known as linear cauterization is to be preferred. It consists in making several parallel lines about half inch apart, beginning two inches above the anus, carrying them downward through the mucous membrane and out at the anus. After the cauterization has been made the rectal walls

should be kept separated with vasellated gauze. The treatment consists in occasional irrigation, rest in bed. The best effects of this operation are not seen until several weeks thereafter, when the scars have formed.

Shall the Physician Divide the Fee with the Surgeon.

W. L. Capell, in the Georgia Journal of Medicine and Surgery for August, discusses this very burning question of the times. He says that when wealthy neurasthenics from some of the large business concerns of a city consults a surgeon (one who has carved for himself a great reputation), on examination finds a case of nerve exhaustion, due to overwork or worry, seeing that the case is not in his line and that he is not in the condition to give the proper treatment, but one that should be under the management of some intelligent, rural physician, he refers him to Dr. A., of B., a small town some distance in the country; the patient is informed that Dr. A. is a man of ability and possesses every faculty for the treatment of such a case; an abundance of fresh air; a good team and buggy to drive him around; ample time and inclination and patience to combat his hobbies; will be delighted to regale him with interesting stories to divert his mind from his many ailments and business cares; to answer the hundreds of questions that he will want to ask about himself; to explain the reason for the migratory pains, peculiar sensations and strange feelings in the head; to explain why his water is sometimes colored and at others clear, and will be pleased to clear up the mysteries of the varies colors of the feces; he will see that the apartments are cheerful and healthful and that a proper quantity of well-cooked and easily-digested and nourishing food is regularly taken and that all the organs are acting to the end; that good, pure, rich blood will be furnished from which to replenish the exhaustive nerve fluid; will also see that the proper nerve tonics and reconstitutives are administered. He is also informed that in two or three months, under the skillful management of Dr. A., he can expect a complete return of health. This, he is informed, will require a great deal of the doctor's time, as well as the exercise of great tact, patience and skill. But his fees will be reasonable—perhaps not exceed a hundred a month. Should this advice ever be given by a surgeon to a patient of this kind (which is not at all likely), we can see nothing unethical in the doctor dividing the fee with the surgeon. The

facts are that when a patient of this kind consults a surgeon he looks him carefully over to find something upon which to operate, or, at least, an excuse for sending him to the hospital. If he finds nothing, which is seldom, he sends him off to some spring or sanitarium, where he can meet with plenty of others similarly afflicted, with whom he may indulge the propensity for discussion of his many ailments which materially lengthens the duration of the disease, or may entirely preclude the possibility of recovery.

Reciprocity between the surgeon and doctor is like the fable of the lion's feast—the tracts all go one way.

The writer speaks from personal experience.

Summer Diarrhea in Infants.

In discussing the treatment of summer diarrheas in infants, C. G. Kerley, in the Medical News for August 4th, says that out of the long list of drugs recommended for this condition, only four are of decided value. They are castor oil, calomel, bismuth and opium. The latter should always be given with caution and to meet special indications. It should never be given when the passages are less than four in the twenty-four hours. It is only given when the passages are very frequent or when they are large and watery. As to the form, he prefers Dover's powder, in 1-4 to 1-2 grain doses every two or three hours for a child eight months of age.

Cases in which there are infrequent foul stools, prostration and stupor, require only calomel and castor oil, diet and bowel irrigation.

Irrigation should not be overdone, but used in those cases where the stools are infrequent or where there is blood or mucus.

It is not enough that the child be given sterilized milk and breast milk; he must be made comfortable. The clothing should be of the lightest and on very hot days he should be in the shade, if in the country; if in the city, the coolest room in the house or apartment is far better than hot dusty streets. Whether in the city or country two or three fifteen-minute spongings with water at 60 deg. F. will make the child ever so much more comfortable. Further, we know the digestive capacity is lessened during the heated term and the milk should be reduced in strength from one-fourth to one-third on the very trying days, adding water to replace the quantity removed.

The mother should always wash her hands with soap and hot water before preparing the infant's food, before handling

nursing bottle, nipples or any nursing apparatus. The infection may be carried to the feeding utensils by the hands of the mother, other children may become infected, or reinfection take place in the one already ill. A child with summer diarrhea should not come in contact with other young members of the family, for summer diarrhea unquestionably must be placed in the list of communicable diseases.

Sunstroke.

The weather of the passing summer has been sufficient to bring out some practical points on this subject, as in a number of our large cities the temperature stood above 90 for days and weeks, according to Hospital for August.

Much work has been done lately in the direction of elucidating the pathology of sunstroke, but it cannot be said that as yet any very firm or satisfactory conclusion has been arrived at. It has long been held that insolation, sunstroke, heat stroke, thermic fever, or siriasis, as some prefer to call it, is due to the exposure of the body to excessive heat, but even if that be granted, investigators are by no means unanimous as to the manner in which the symptoms are produced, whether, that is, they are the immediate consequences of the action of undue heat upon the tissues, notably the nervous structures, or of changes in the blood caused in the same way; or are the result of a poisoning of the system by some toxic product, an acute toxæmia arising suddenly in the body under the influence of heat, and acting with destructive energy upon the cells of the nervous system, especially those governing the heart and controlling the vaso-motor apparatus, or finally whether they arise from an infection which only operates in the presence of high temperature. We, at any rate, seem to have got so far as this, that the blood of patients suffering from insolation does seem to contain a toxic substance which can be shown by experiments on animals to be somewhat analogous in its action to snake poison. But whether that is caused directly by heat, or is the result of some ferment, and, if the latter, whether this ferment arises from within or is an infection from without, are questions as yet quite undecided.

Surgical Pain.

G. Ryder, in the Boston Medical and Surgical Journal for August 16th, prefaces a paper on this subject with Hilton's saying that every pain has its distinct and preg-

nant significance, if we will carefully search for it.

He first considers the gesture of pain, which is often more accurate than the verbal description.

Inflammatory pain has three important characteristics, it is elicited or provoked by pressure and is greatest as a rule at the seat of inflammation.

The second characteristic is that movement of the part even in the maintenance of its own function causes pain.

The third is that there is disturbance of the normal function of the part.

He accepts Lomer's classification of pain as it applies very well for practical purposes to all visceral lesions. He divides pain into traumatic, contractile, inflammatory, neuralgic, hysterical.

To determine the significance of acute abdominal pain we must consider the location, the condition of the muscular wall, and various conditions of the bowels as obstructions, whether by bands and apertures, intussusception, volvulus, stricture or fecal accumulation.

Twisting abdominal tumors may be the cause of obstruction.

The pain of peritonitis is characteristic, but in the later and hopeless stage is absent altogether.

He brings up the unmentionable disease and we skip that part.

Pelvic pain is usually more definitely located and amenable to examination. He closes with typhoid perforation in which it is so important to make an early diagnosis if surgical intervention is to be the remedy employed.

Smallpox in London.

The Hospital for July 14th says that the interesting little outbreak of smallpox which has recently taken place in and around Kensington serves at least to teach us that this disease, however thoroughly it may be suppressed by vaccination, and kept in check by isolation, is but seldom far away, and is liable at any moment to become epidemic if the opportunity be offered. The special lesson, however, which is taught by this particular outbreak is as to the care which it is necessary to exercise in the diagnosis of those irregular or abortive forms of eruption which are apt to characterise the disease when it is modified by a partially protective vaccination. In the Kensington cases, the three diseases which appear to have been simulated were measles, chickenpox, and eczema. The mistake between smallpox and measles is not uncommon, and is often quite excusable. When-

ever the former diseases is prevalent a few cases occur in which the on-coming of measles is mistaken for that of smallpox; while the initial rashes of smallpox, and even the eruption itself on the first or second day of the confluent form, are not infrequently mistaken for the rash of measles. The great imitator of smallpox, however, is chickenpox. Yet the differences between the two are very marked, especially if one can make sure of the history, and can see the eruption before it has been deformed by scratching; but with a fading eruption and with the careless history given by an unobservant mother, it is to be admitted that serious difficulty sometimes arises. In 1895, the last year in which there has been any serious prevalence of smallpox, 63 cases removed by the ambulances of the Metropolitan Asylums Board, and certified as suffering from smallpox, were found on arriving at the wharves to be affected with chickenpox only. Turning now to the year 1898, in which the total number of smallpox cases admitted by the Metropolitan Asylum Board amounted to only five, we find that 31 cases were sent in certified as smallpox, and that in 17 of these chickenpox turned out to be the real malady. It is clear that, as the result of the careful manner in which smallpox has been dealt with by the authorities during the past 20 years, a large number of medical men have seen so little of it that they find considerable difficulty in diagnosing the disease.

Infant Feeding.

Alexander McAlister, in the *Journal of the American Medical Association* for July 28th, has a paper on this subject.

In speaking of artificial food he says that his experience leads him to place special emphasis on the careful selection of a product of milk; that which is properly collected, cooled and at once tightly bottled, when delivered within a reasonable time and kept in close proximity to ice until needed, is always to be preferred. Such milk may be expected to yield even better results than laboratory milk; under ordinary circumstances it need not be subjected to the usual process of sterilization. So much for the cleanliness of the milk itself, and in conclusion a word about home modification. The excess of proteids is best reduced with water—that which has been previously boiled; and for an infant under 2 months old, pure milk, diluted with equal parts of water, will generally prove a proper food. For older infants, if the character of the stools or the progress in growth indicates that a change may prove beneficial, a smaller quantity of

water or water with one of the artificial foods should be used in modifying the cow's milk. It is here that the infant foods of commerce are properly employed. They reduce the native proteids, render more easily digested the relatively tough and dense casein from cow's milk and serve as ballast. One of the few brands which have been employed by the profession for many years can generally be selected—that which seems best to suit the needs of the individual case—with a fair degree of assurance that satisfactory results will follow.

Insolation.

The various degrees of insolation, according to Bernald S. Simpson in the *Interstate Medical Journal* for August, are:

Thermic Fever.

Heat Prostration.

Sunstroke or insolation.

In the latter he says the treatment must be energetic from the beginning, and must be directed to above all reduce the temperature. This is accomplished by placing the patient into ice water, packing ice about him and rubbing him with ice. Care must be taken to remove the patient from the ice and place him in a dry bed as soon as his temperature is reduced to 103 deg. Then he must be observed for five or ten minutes. If, during this time, his temperature rises, he must be placed back into the ice bath until the temperature is reduced to 101.5 deg. At no consideration should the temperature be reduced lower than that suddenly, as frequently after the reduction of a hyperpyrexia to 102 deg., the temperature persists in falling to away below normal, so that 92 has been observed. When a temperature of 102 or 103 deg. has been reached, the necessity for break-neck speed is over, and we should proceed judiciously. The temperature should be taken by rectum or vagina, and should be measured constantly while the patient is in the tub; later on, when in bed, every half hour or more frequently. Often after the temperature has been reduced, there is a certain rising of the temperature to 107 to 109 degrees, and this may occur several times. While the patient is being rubbed with ice, cold water should be poured on his head from a low distance, a very cold enema can be administered.

The practice of bleeding or transfusing sunstroke patients is not to be encouraged. When the patient is placed to bed his feet must be kept warm with hot bottles, and, if there is a tendency to subnormal temperature, blankets and hot bottles should be placed about him. Even the subnormal

temperature has to be watched for an elevation which is likely to occur during the first six hours. As soon as consciousness returns and secretion of perspiration is established, the danger of immediate fatal issue is passed. During the time of treatment stimulants should be administered freely—strychnia, caffeine, ether, digitalis, and brandy making our best standbys. Do not overstimulate the patient; heart paralysis is likely to set in at any moment, and is likely to be due to hyperpyrexia as to overstimulation. After consciousness has been fully restored, the patient has to receive the care of a convalescent from any severe febrile disease. Frequently some temperature persists and defervescence by lysis; occasionally there are rises of temperature for the first few days. However, the patient has to remain abed until absolutely all fever has left him, and is to be fed a liquid of light diet for a week. The urine and perspiration must be watched, and occasionally diuretics and diaphoretics administered. Consequences of a serious nature occur frequently after sunstroke. Acute mania, melancholia, pneumonia, and articular rheumatism have been seen to follow, and the death-rate is exceedingly high.

Myotherapy.

According to Nathan Herman, in the Maryland Medical Journal for August, massage is not contraindicated in all febrile conditions but its field of usefulness is in great measure limited to afrebrile conditions.

He says that it is indicated for the removal of exudates or infiltrations, for the after-treatment of fractures and for the treatment of some forms of paralysis.

Various forms of exercise are indicated for the correction of deformities, especially those of the spine, scoliosis, kyphosis, lordosis. In these deformities, except in the case of Pott's disease, where necrosis of the vertebral bodies has taken place, it is only necessary to develop the muscles which, on account of weakness or lack of development have allowed their antagonists, which are stronger or better developed, to distort the body. Other deformities, such as the various forms of talipes and genu varus and valgus, are amenable to the treatment with or without surgical aid, according to their severity. In all these cases it is usual to begin with massage and passive or resistance movements, and afterwards to prescribe active gymnastics. Time will permit no more than the mere mention of the long list of ailments which are benefitted by myotherapy. Such are; chorea, writer's

cramp, cerebral congestion, indigestion, constipation, neurasthenia, anemia, chlorosis, threatened or incipient phthisis, malnutrition, obesity, rheumatism, etc.

Medico-Legal Relations of the X Rays.

In the American Journal of the Medical Sciences for July, we have the report of the committee of the American Surgical Association on the Medico Legal relations of the X rays.

The report, as made by the chairman, J. William White, after a careful review of the evidence arrives at the following conclusions:

The routine employment of the X-ray in cases of fracture is not at present of sufficient definite advantage to justify the teaching that it should be used in every case. If the surgeon is in doubt as to his diagnosis, he should make use of this as of every other available means to add to his knowledge of the case, but even then he should not forget the grave possibilities of misinterpretation. There is evidence that in competent hands plates may be made that will fail to reveal the presence of existing fractures or will appear to show a fracture that does not exist.

In the regions of the base of the skull, the spine, the pelvis, and the hips, the X-ray results have not as yet been thoroughly satisfactory, although good skiagraphs have been made of lesions in the last three localities. On account of the rarity of such skiagraphs of these parts special caution should be observed, when they are affected, in basing upon X-ray testimony any important diagnosis or line of treatment.

As to questions of deformity, skiagraphs alone, without expert surgical interpretation, are generally useless and frequently misleading. The appearance of deformity may be produced in any normal bone, and existing deformity may be grossly exaggerated.

It is not possible to distinguish after recent fractures between cases in which perfectly satisfactory callus has formed and cases which will go on to non-union. Neither can fibrous union be distinguished from union by callus in which lime-salts have not yet been deposited. There is abundant evidence to show that the use of the X-ray in these cases should be regarded as merely the adjunct of other surgical methods, and that its testimony is especially fallible.

The evidence as to X-ray burns seems to show that in the majority of cases they are easily and certainly preventable. The essential cause is still a matter of dispute. It seems not unlikely when the strange sus-

ceptibilities due to idiosyncrasy are remembered that in a small number of cases it may make a given individual especially liable to this form of injury.

In the recognition of foreign bodies the skiagraph is of the very greatest value; in their localization it has occasionally failed. The mistakes recorded in the former case should easily have been avoided; in the latter they are becoming less and less frequent, and by the employment of accurate mathematical methods can probably in time be eliminated. In the meanwhile, however, the surgeon who bases an important operation on the localization of a foreign body buried in the tissues should remember the possibility of error that still exists.

It has not seemed worth while to attempt a review of the situation from a strictly legal stand-point. It would vary in different States and with different judges to interpret the law. The evidence shows, however, that in many places and under many different circumstances the skiagraph will undoubtedly be a factor in medico-legal cases.

The technicalities of its production, the manipulation of the apparatus, etc., are already in the hands of specialists, and with that subject also it has not seemed worth while to deal. But it is earnestly recommended that the surgeon should so familiarize himself with the appearance of skiagraphs, with their distortions, with the relative values of their shadows and outlines, as to be himself the judge of their teachings, and not depend upon the interpretation of others who may lack the wide experience with surgical injury and disease necessary for the correct reading of these pictures.

These conclusions were unanimously adopted by the American Surgical Association.

Neuroses of the Heart.

The Medical Standard for August contains a paper on neuroses of the heart by Albert Abrams in which he discusses palpitation, tachycardia, brachycardia, arrhythmia, and angina pectoris.

In speaking of the treatment of palpitation he says that suggestion plays an important role. Convince the patient that the trouble is purely functional and half the battle is won. To logically carry out this suggestion medicines are contra-indicated; as such may be effected by hygienic measures. Regulating the methods of living, careful dieting, avoidance of alcohol, coffee, tea and tobacco, interdicting sexual excite-

ment, bowel regulation and a modified rest cure are a few hygienic regulations.

The paroxysm of palpitation may be arrested by certain mechanic manipulations, especially in hysterical persons, by pressure on the vagus in the neck and certain hysterogenic zones on the abdomen, particularly the ovarian region. Rest in bed and an ice bladder to the precordia may also be tried. The bromides, valerian, camphor and hyoscyamus may prove beneficial, but the most effective remedy is unquestionably morphin when given hypodermically. Recurrent paroxysms may be prevented by observing indications for therapeutic measures, the treatment of anemia, hysteria, malaria, gout and the uric acid diathesis. Galvanism of the vagus is sometimes beneficial. The continued use of tincture nuxvomica in large doses is particularly valuable. One of his patients, a physician, suffering from palpitation for ten years, found almost immediate and permanent relief from the Schott methods of resistance, exercises and baths.

Opium in the Summer Diarrhea of Children.

According to Floyd M. Crandall, in the International Medical Magazine for July, opium is contraindicated in the first stages of acute diarrhea, before the intestinal canal has been freed from decomposing matter; when the passages are infrequent or of bad odor; when there is a high temperature or cerebral symptoms are present; when its use is followed by elevation of temperature or the passages become more offensive.

It is indicated when the passages are very frequent, with pain; when the passages are excessively frequent, large, and watery; in dysenteric diarrhea preceded by castor oil or a saline; in late stages, with small frequent, nagging passages; when the passages consist largely of undigested food, and the bowels act as soon as food is taken into the stomach.

The method of administration is of decided importance. The opiate should not be added to the ordinary diarrhea mixture, which is usually repeated at short intervals. It should be given alone. The dose can thus be regulated with much more certainty. This permits of the diarrhea mixture being largely increased if the exigencies of the case require. Intervals should be sufficient to permit the effect to partially subside before the dose is repeated. They should rarely be less than three hours, while four hours is more commonly advantageous. Lack of precisions and exactness has been the cause of much of the harm that has re-

sulted from the use of opium in diarrhea. Precision can only be attained by knowing the precise amount of each dose and the exact interval at which it is given. Opium is too potent a drug to be administered with the inexactness with which chalk mixture, bismuth, and the astringents are commonly prescribed. A little more or a little less of those preparations will do no harm; too much opium may be fatal.

The dose varies greatly, and it is impossible to lay down positive rules. It should be as small as possible, the object being to check peristalsis and relieve excessive pain. Narcotism should be strictly avoided. Under one year, the dose of opium or its derivatives as compared with other drugs is small.

The preparations most available for young children are paregoric and the deodorized tincture. Dover's powder is used by some practitioners. Morphin is very rarely required. When given hypodermically to young children, the dose should not be more than 1-200 grain. The dose of paregoric may be as follows: At three months, ℥ii; one year, ℥viii; five years, ℥xxx. The dose of the deodorized tincture may be at three months, ℥ 1-12; one year, ℥ $\frac{1}{3}$; five years, ℥ii. The dose of Dover's powder may be at three months, gr. 1-12; at one year, gr. $\frac{1}{2}$; at five years, gr. 2 or ii. It should be remembered that these liquid preparations are tinctures and the dose, therefore, if measured in drops, should be twice those here given. These doses are but approximate, and it may be necessary to diminish or increase them for different individuals,

The Neuron Conception.

Sidney J. Schwab, in the St. Louis Medical Review, discusses the researches of Apathy and Bethe and their effect upon the conception of the neuron. It appears that the idea of a cell unit has been somewhat upset by these investigations, as Bethe has shown that the nerve cell is not absolutely essential for the performance of a reflex action. In his latest article which is purely an anatomic study of the question, he closes with the following conclusions:

In all cells of the central nervous system of vertebrate animals examined, which were regarded as being true ganglion cells, individual fibrils (neurofibrils, primitive fibrils) can be demonstrated. The only exceptions to this are the small cells of the thalamus opticus and the common granular cells of the cerebellum. The true nervous nature of these latter cells has never been proven. The fibrils do not as a rule anas-

tomose with one another within the cells or dendrites. Exceptions to this are the cells of the lobus electricus of the Zitterrochen; perhaps also the cell of the ammon's horn, of the ascending root of the trigeminus, and the Purkinje cells. In the first mesh formation can be positively demonstrated.

All ganglion cells and also their protoplasmic endings, even to the most minute branches, are surrounded by a specific net structure, which he calls Golgi net (Golginetz), as exceptions are those mentioned before.

The Golgi net and the neighboring contiguous neuron are for the most part bound together by means of net meshwork (Netzmaschen). In those places in the central nervous system in which ganglion cells and their branches lie closely together, diffuse Golgi nets are formed, as in the cortex of the cerebrum and cerebellum, ammon's horn, substantia gelatinosa.

From the above findings the course of the neurofibrils in the central nervous system of vertebrates can be demonstrated. They point to the fact that in vertebrates as well as invertebrates the continuity of the neurofibrils is complete.

But Schwab says that in spite of Bethe and Apathy's work, which must be regarded as of the utmost value, the central nervous system is in possession of a definite cell unit. With the cell unit comes the possibility of a cellular pathology, and the general tendency towards the application of the cell doctrine to the study of the various problems of the nervous system need in no sense be interrupted by the researches of Apathy and Bethe.

Paralysis Due to an Overdose of Camphor.

T. B. Greenley, in the American Practitioner and News for July 15th, tells of a case of local paralysis which he thinks was due to an overdose of camphor.

The patient was a woman, age 78, who took a large dose of spirits of camphor. In an hour or more she became very restless, and on attempting to get out of bed fell on the floor in an entirely helpless condition; in fact she was thought to be dead. She revived some on being put back to bed, but it was some time before she regained consciousness.

On examination it was found that her right hand and the right side of her face were paralyzed. He thinks it was due to the powerful stimulating effect of the camphor. In four weeks the affected side had regained its normal powers. Nux vomica and gentle massage were the remedies used.

The Plague in San Francisco.

In the Occidental Medical Times for August, W. H. Kellogg reports on the thirteenth case of plague in San Francisco.

This was a "living" case and the important points are as follows: A Chinaman from the infected district is admitted to the City and County Hospital with fever, delirium and a large and painful bubo, the three principal symptoms of bubonic plague. A reliable history is obtained of an illness of only three or four days' duration. The chief attending physician suspects plague and orders the patient isolated. A guinea pig is inoculated with fluid extracted from the bubo the day before the patient died. The patient dies and is autopsied, the result showing that he died of an acute bacterial infection, such as bubonic plague is, and absolutely nothing else was found. The guinea pig dies and is autopsied, the result showing that it died also of an acute bacterial infection. Subsequent cultural and inoculation experiments by the official bacteriologists of the United States Marine Hospital Service, the State Board of Health and the City Board of Health, proved absolutely to the satisfaction of all of them the following: (a) The bacillus, which caused the death of the guinea pig was the only organism present in the said pig. (b) This organism was the bacillus of plague. (c) The bacillus of plague, which killed the guinea pig was obtained from the Chinaman while still alive. (d) The same bacillus of plague was found in the spleen of the Chinaman. (e) No other organism was found in the spleen of the Chinaman. (f) In the identification of this bacillus all the postulates Koch have been fulfilled to the letter. (g) The Chinaman was suffering from bubonic plague when he entered the hospital, he died of bubonic plague and no other sufficient condition or disease was found at the autopsy.

Preventive Treatment of Puerperal Fever.

Stephen Hornsberger, writing in the Virginia Medical Semi-Monthly for August 10th, says that it is more a question of the condition of the patient than of the mere fact that germs are present.

He believes in cleanliness, but too much routine methods is condemned.

Nature provides her own barrier against infection, and too much scrubbing, douching and curetting is not good for the patient.

Immunity is the cardinal point in the treatment of puerperal fever, and he believes that those who have it are predisposed

thereto by lack of nerve force and vital power. We should see to it that the pregnant woman is kept in the best possible condition.

After delivery the blood circulation should be equalized so as to secure proper involution. Blood stasis in the submucous vascular network invites infection. Hence in tardy or inefficient uterine contractions from vasomotor or other weakness, he advises stimulants, hot rectal irrigations and ergot, one or all as indicated.

It is a fact, perhaps, that oftentimes we are so intent on killing out the germs that we forget to save the patient.

Pernicious Nausea Caused by Ectopic Gestation and Syncytial Tumors.

E. P. Davis and H. F. Harris, in the American Journal of Obstetrics for July, report two cases of pernicious vomiting.

In the first case there was an ectopic pregnancy followed by rupture, and removal by section, the patient recovering.

In the second case the uterus was emptied of an early ovum and membranes by the curette. Nausea was temporarily relieved. She did not regain strength, vomiting returned, maniacal at times, involuntary evacuation of feces and urine, and death from apparent exhaustion.

Consciousness was retained until just before death, pupils unaltered and intense headache was her one complaint.

Autopsy showed a number of small tumors in the brain and a large tumor of the left kidney. The primary tumor was evidently that of the kidney and were carried by the blood current to the brain. The tumors found in the brain were principally blood with the syncytial masses in the center entirely unconnected with the surrounding nerve substance.

This is, perhaps, the first reported case of pernicious nausea in which syncytial growth was a factor.

Poisoning from Quinine.

Franklin W. Bock, in Merck's Archives for August, reports a case of marked poisoning from five grains of quinine. The patient had shown a marked idiosyncrasy to quinine once before, and so he was given one grain every hour for five doses.

Deafness, blindness, erythema, wandering mind, delirium, and almost collapse were some of the symptoms caused by the drug. Two weeks after the patient was well and the scales showed a loss of 20 pounds. He had no more malaria.

Phthisis Pulmonalis Treated with Watery Extract of Tubercle Bacilli.

James D. Osborne, in the Texas Medical Journal for August, writes very favorably of the use of watery extract of tubercle bacilli in consumption.

He says that if the patient be not too far advanced in consumption—that is, if in the first stage, we can and do hold out the promise that a cure can be effected. In cases where nutrition is bad, cavities formed, and prostration great, emaciation going on, chest sinking in, and nights sweats exhausting, there is no use in using the remedy; for it is impossible for nature to overcome the great loss of lung tissue, weakening and inanition; a prostrated “lunger” has no hope and it is wrong to place such a case among those amenable to treatment.

The best site for the subcutaneous injection is the intrascapular region, always using caution at the point of injection by rendering the parts perfectly aseptic and make no second injection at the same point for a week or ten days. If the reaction is too marked it is best to let the patient rest for a few days or until the fever subsides.

Rapidity of Operations.

One of the greatest advantages of experimental work upon dogs is that the operator acquires a dexterity and confidence in himself by reason of which he can do his work quickly and well, says Emory Lamphear in the American Journal of Surgery and Gynecology for August. Be fast but not too fast.

“Chronic” surgery means much shock, much chloroform is much danger.

Long exposure of wound surfaces and of viscera gives greater chance of wound infection. He says that two or three strokes of the knife should be all that is necessary to open the abdomen. The operator's clothing should be arranged so as never to interfere with the quickest movement.

Numerous assistants means delay; have only two well trained.

Use the fewest possible instruments.

Have sutures and dressings all arranged beforehand and the wound closed as rapidly as it was made.

Rapid Method of Enucleation of the Eye.

A rapid method of enucleation is described by A. T. Mitchell in the Mississippi Medical Record for August.

A curved needle with a strong double thread was passed well into the scleral tissues to give a stout hold on the eye ball.

The conjunctiva was snipped vertically

over the insertion of the internal rectus. The lower blade of a half curved pair of scissors was passed under the tendon and it raised into view.

The tendon, capsulo bulbar fascia, trabeculae, subconjunctival connective tissue and conjunctiva, incised at one time, not quite to the end of the scissors. The lower blade, still in the capsular space is advanced under the superior rectus and a similar cut made, the superior oblique and tissues over it next. The lower blade of the scissors that has never been removed from the capsular space is now carefully shifted downward, turned, and inserted under the inferior rectus, which with the inferior oblique is similarly divided.

The bulb can now be rotated outward, and one cut for the nerve and one for the external rectus and tissues over it completes the operation.

There has been no preliminary dissecting up of conjunctiva, no feeling around with a hook, no indefinite snipping in a bloody, obscure field. All operations done with clean, clear cuts are better than if done with a multitude of small piece-meal ones.

Renal Surgery.

H. B. Sweetser, in the Medical Dial for August, in tracing the progress of renal surgery says that although it had its origin in nephrectomy, yet step by step, its advance has been towards conservatism, the effort being made, in many phases of nephritic disease, to preserve, when possible, so important an organ as the kidney to the economy. This has been aimed at in early nephro-lithotomy for calculus; in partial resection in tubercular disease, benign tumors, and monolocular cysts; in urethral anastomosis and implantation for injury, obstruction or permanent fistula; in nephrorraphy for movable kidney; in nephrotomy for relief of tension in acute and chronic nephritis.

He says that in renal surgery our watchword should be “early exploratory incision,” for this in the end will prove conservative, as by it many a kidney may be saved before irretrievable damage is done.

In nephro-lithotomy he advises the following technique:

The oblique incision from below the twelfth rib at anterior border of the erector spinæ muscle to one inch above and in front of the anterior superior spine of the ilium; this may be extended backward to reach the twelfth rib, or forward parallel to Poupart's ligament to reach the ureter,

The kidney is completely detached from its investing fibro-cellular capsule.

The pelvis of kidney and ureter are carefully palpated.

The kidney is bodily delivered on to the surface of loin, but without forcibly pulling on pedicle; if this is not possible, then a large incision so as to have complete visual control.

Incise the convex border of kidney and insert finger and explore: this incision goes into pelvis and may extend from pole to pole. Needling is uncertain and ought to be abandoned.

Always pass catheter through ureter clear to bladder whether a stone is discovered or not. If ureter cannot be entered through the incision in convex border, then open posterior surface of pelvis, this cut being subsequently closed with a Lembert suture.

If parenchyma is apparently healthy, it may be finally sutured, according to Morris, but Fenger warns against suture in all cases of stone.

Always drain wound, but do not carry tube into the kidney itself.

In simple cases healing is complete in 11 or 12 days, but where there is much disorganization 5 or 6 weeks may be required.

Suturing the Round Ligaments to the Vaginal Wall in Retrodisplacements of the Uterus.

Hiram N. Vinebery, in the American Journal of Obstetrics for August, describes in detail the technique, indications and remote results of suturing the round ligaments to the vaginal wall for retroversions and flexions of the uterus.

He considers 53 cases operated on by his method covering a period of four years.

His results were very satisfactory, there were no deaths, the conditions were relieved and there was no interference with labor in the cases going to term.

The indications for this operation are as follows:

In all cases of mobile retroversions and flexions of the uterus in which a surgical procedure, for one reason or another, may be deemed necessary.

In the same conditions when they are associated with prolapsus uteri of the first and second degrees.

In all cases of adherent retroversions and flexions in which the uterus only is adherent.

In cases of retroversions and flexions associated with moderate disease of the adnexa, such as cystic ovaries, catarrhal salpingitis, hydrosalpinx and hematosalpinx and pyosalpinx, when the latter is of moderate size and not too firmly and extensively adherent.

It is the operation of predilection in women with thin, lax abdominal walls which would offer a poor support for the uterus. The same applies to the extreme opposite condition, *i. e.*, in women with very fat abdominal walls in whom a supra-pubic operation constitutes a very serious affair. It is contraindicated in the following conditions:

In congenital retroversions.

In retroversions and flexions when the broad ligaments are very much infiltrated and shortened by inflammatory disease.

In retroversions and flexions associated with very marked and extensive disease of the adnexa, and also when the adnexa are less diseased but are very firmly and extensively adherent.

In complete procidentia where there is a veritable hernia of all the pelvic organs.

In some rare cases of nulliparae in which the vagina is very deep and narrow.

In cases in which, in addition to the pelvic lesions, there are evidences of disease higher up in the abdominal cavity, as, for instance, chronic appendicitis.

Surgical Disinfections.

Carl E. Black, in the Medical Fortnightly for August 10th, reviews the conclusions of A. J. Ochner in regard to surgical cleanliness.

He says that while, theoretically, it is impossible to disinfect the skin of the patient or the hands of the operator, practically it is easy to obtain a degree of surgical cleanliness that will insure primary wound healing. Strong chemicals are indicated in theory, but in practice careful washing with soap, water and alcohol is sufficient and even safer for the patient.

The hard part is to keep the hands clean after they have once been made so. Sutures are only dangerous when drawn too tightly.

Catgut is safe when clean.

In order to have the wounds heal without suppurating he believes the following conditions should be considered:

The surgeon, his assistants, and nurses must be habitually clean, and the skin of their hands must be free from irritation and roughness.

Their attention should constantly be directed toward the prevention of accidental infection.

The surgeon and his assistants should be careful not to breathe or speak into the wounds.

Tissues should not be exposed to unnecessary traumatism.

Sutures should not be tied tightly enough to cause pressure necrosis.

A reasonable system should be employed, so that every one concerned can assist intelligently in preventing infection.

Syphilis.

The Colorado Medical Journal for July has a symposium on syphilis. E. P. Hershly discusses the modes of infection. There is but one mode, that is, by absorption by contact. Indiscriminate kissing, using infected soap, towel or cup.

The diagnosis of initial syphilitic lesions is taken up by Will B. Davis, the bacteriology by W. C. Mitchell, the cutaneous manifestations by J. M. Blaine, the ocular manifestations by Edward Jackson, tertiary manifestation of the ear by P. F. Gildea, syphilis of the throat by F. P. Gallaher, bone and joint syphilis by W. W. Grant.

The articles are concise and to the point.

Trauma and Tuberculosis of Bones and Joints.

Geo. R. Highsmith, in the Medical Herald for July, does not think much of the value of trauma as an etiological factor in tuberculosis of bones and joints. He bases his opinion upon his review of literature and his own experience.

He quotes a number of authorities in regard to the matter, but concludes in a very skeptical mind. One of the things to take into consideration in estimating the value of trauma in chronic tubercular bone disease is: How many cases of accident can we recall to those suffering from pulmonary tuberculosis, in which we have every reason to believe that the whole system is reeking with tubercle bacilli, and no manifestations of local infection at the point of injury followed. Again, while clinically, tuberculosis is most frequent in the lungs, and perhaps next in the cancellous structure of the bones, bacteriologists tell us that the skin, nervous system, and abdominal organs are each more often affected; yet no one thinks of ascribing traumatism as a factor except in bone lesion.

The Treatment of Empyema.

Edward Martin, in the Therapeutic Gazette for August 15th, discusses the treatment of empyema.

He says that empyema is best prevented by promptly evacuating all considerable inflammatory effusions.

In the diagnosis of these effusions, by means of exploratory aspiration, the skin should be punctured by a tenotome at the point where the needle is to be driven in.

Serous effusions are best evacuated by aspiration. If they reaccumulate after the

third evacuation, they should be subject to continuous siphon drainage; the puncture being made by a small trocar and canula, the latter being of such size that a small drainage tube may be slipped through it.

Recent empyemata are best treated by continuous siphon drainage, the tube being introduced through a canula of at least the diameter of the little finger.

When, because of a narrow intercostal space or because of constant blocking with fibrinous material, siphon drainage thus provided is inadequate, an inch of one of the ribs (usually seventh or eighth) should be resected, and a drainage tube the diameter of the thumb should be used.

When the conditions are such that it is obviously impossible for the lung to expand under the influence of siphon drainage and respiratory exercises, Delorme's operation of stripping the pseudomembrane from the compressed lung should be attempted.

When Delorme's operation is impracticable, a resection of the ribs (Estlander) or of the chest wall and thickened pleura (Schede), corresponding in extent to the size of the underlying cavity, is indicated.

Treatment of Lacerated Wounds

This subject was discussed by W. E. Lower, according to the Cleveland Journal of Medicine for July. The paper embodied observations based on 2,500 cases.

As all lacerated wounds are more or less infected they should be treated antiseptically, as it is practically impossible to render them aseptic. The best antiseptic is corrosive sublimate. It is effective and economical. Carbolic acid, formalin, and others of the new antiseptics have not stood the test as well as the bichlorid. Iodoform and dusting-powders are not used on first dressings, as they are not antiseptic. About 50 per cent. of patients in whom iodoform is used develop a dermatitis and this, with its disagreeable odor, should condemn it. Ointments and poultices like powders are condemned. Just as little of the lacerated tissues as possible should be cut away. It is better to dress a wound with doubtful tissue remaining than to sacrifice what might be saved. Let Nature decide what is to be lost and it may be readily removed later. The skill of a surgeon is shown in what he can save and make useful, and not in what he can destroy. If tendons or nerve-trunks are severed they should be sutured at once. Rarely is it necessary to suture a lacerated wound, especially of the fingers or scalp. The edges may be approximated by a gauze bandage, and over this a pro-

fuse dressing of gauze and cotton, saturated with bichlorid is applied. Much destruction of tissue and impairment of function result from the pernicious practice of making a close approximation and suture of lacerated wounds. Approximation by adhesive strips is even worse. The first dressing is wet and the subsequent ones are moist. A wet dressing is completely saturated by this solution; a moist one is wrung dry. When a laceration is near a joint, the injured part should be put to rest by splint or fixation to the body. If no trouble arises the first dressing remains on two days. A moist one is then applied every second day. When granulations appear, boric acid may be used as a dusting-powder. This has proved to be the best and most economic. Under treatment as outlined infections seldom if ever occur. At first sign of redness, pain or swelling, the part should be sacrificed and a wet bichlorid dressing applied every two or three hours.

Treatment of Heart Disease in Children.

According to the Archives of Pediatrics for August, Hare, in discussing this subject, said that children are oftentimes entirely free from symptoms, even when organic heart disease is present, and that, therefore, treatment is often superfluous. When treatment is necessary he considered that rest constitutes, in importance, about three-fourths of all the management. He disbelieved in the attempts which are often made to encourage the growth of these children. The stunting is a compensatory process to relieve the damaged heart from as much work as possible, and it should, therefore, not be interfered with. He considers puberty a particularly dangerous period for these children, and insisted that rest is very important at that time. Among drugs he considered alteratives the most important, and thought that arsenic was most valuable, chiefly through its action upon the blood. Anemia is frequently the most important symptom present, and through the improvement of the blood and of the general nutrition of the body arsenic has a valuable influence. The bichlorid of mercury in doses of 1-1000 to 1-300 of a grain is also valuable. The use of cod-liver oil he discountenanced as a rule because it is likely to increase the accumulation of tissue, and particularly of fat, and thus damages the heart by increasing its work. As a rule, he considered hematics the most important drug. Digitalis, he insisted, is used in too large doses, particularly in children. It is likely to show its bad effects more readily in children than in adults.

When it is given, he recommends that very small doses should be used, 1 to 2 minims or less, unless an emergency should demand larger doses. Also, it should be given for a few days, and then stopped for several days, to be resumed again. Its action persists sufficiently long to make this method of dosage all that is necessary, and its continuous use is fruitless and likely to be harmful. Strychnin he also considered a seriously abused drug. Temporary good effects are sometimes seen from the use of strychnin in heart disease, but its effects do not last, and increased doses are then necessary, and this ultimately causes severe general nervous irritability of the heart with other tissues. He mentioned the case of a child that had a pulse of 160 of irritable character, with slight persistent temperature following typhoid fever. The child had been on doses of 1-30 grain of strychnin four times a day for a long time, and when the strychnin was stopped the pulse rapidly decreased to normal, and the temperature soon disappeared. He stated that strychnin is a whip to the heart and not a tonic. As to alcohol, he considered it rarely necessary in heart disease of children.

Tubercular Disease of the Testicle.

In the Canadian Practitioner and Review for August, Geo. A. Peters describes a case of excision of the testicle, vas deferens and vesiculæ seminales at one sitting for tuberculous disease.

He advises the perineal route and the incision of Roux of Lusanne.

He says that every case of advanced tubercular testicle should be dealt with by operation, and if the disease is found to have spread up the vas to the vesiculæ seminales, the whole tract should be ablated.

It should be the aim of the surgeon to remove every particle of the disease as clearly as in a case of carcinoma, but failure to secure every atom of disease is much less disastrous than in the case of carcinoma, since the resistance of the tissues to the ravages of tubercle is very considerable.

The patient should be placed under the same hygienic conditions as are found to be favorable for recovery from tuberculosis in other parts of the body.

Transportation of Disease by Dust.

Harold C. Ernst, in the Boston Medical and Surgical Journal for August 2d, calls attention to the irritating effect of dust upon the respiratory tract. Photomicrographs of dust from the street show a variety of minute jagged particles of mineral and vegetable origin. This dust also car-

ries living forms which, of course, is in the dried state.

The different bacteria vary in their resistance to drying.

He quotes the experiments of Germano as showing that certain bacteria were killed on drying very quickly, as those of typhoid, cholera and plague. The diphtheria bacillus, streptococci and pneumococci showed great variation and might live for some time in the dust.

The bacillus of tuberculosis was found to be more resistant than those already mentioned, and this would seem to be the most common danger from dust.

To breathe down two lungs full of irritating dust in which a number of tubercle bacilli were living would seem an ideal way to invite infection.

The Treatment of Inoperable Sarcoma With Mixed Toxines.

According to the New York Medical Journal for July 28, Wm. B. Coley, in the St. Paul Medical Journal for June, says that he sees no occasion, from his results during the past year, to change his previously expressed opinions. He still finds the spindle-celled variety most affected, then the round-celled, and, last of all, the melanotic. He has nothing new to add as regards the preparation and the technique of administration. Experience has shown that the toxines may be given for very long periods without injury to the patient. The micro-parasitic and infectious origin of the disease is the proper explanation of the action of the toxines, and the author even considers that the action of the toxines affords corroborative evidence of the infectious origin of sarcoma and carcinoma. The author reports four additional recent cases and gives the later history of twenty-four previously recorded ones, which certainly tend to support the permanent value of the treatment unless recourse is had to denying the nature of the cases, which, in view of the severe standards of diagnosis, seems unfair, or to the supposition that the cases were instances of spontaneous disappearance, which in the case of such a number is hardly likely. As to the limitations of the treatment, the author says that he has used the toxines in upward of two hundred cases with but two deaths. In estimating the percentage of cures it is well to remember that the treatment is advised only in cases of sarcoma in which there is no hope of cure from operation; in other words, in entirely hopeless cases. The author believes that the most promising field lies in the use of the toxines in small and safe doses directly af-

ter the primary operation, instead of waiting for a recurrence to appear. If the toxines can in a considerable number of cases destroy and permanently cure large inoperable sarcoma, it is reasonable to suppose that their administration after operation will destroy the invisible portions left behind, and thus in a much larger number of cases prevent subsequent recurrence.

The preparation which he believes to be the best is the mixed unfiltered toxines of erysipelas and *Bacillus prodigiosus* made from cultures grown together in the same bouillon and sterilized by heating to 58 deg. C. In children and persons much reduced in strength it is safer to use the filtered toxines. The preparation being bacteriologically sterile may be safely used in general hospital wards.

Therapeutic Value of Electricity.

In a paper under this heading, in the Medical and Surgical Monitor for August, L. T. Lowder has a good word to say for static electricity.

For neuralgia and headaches he uses the current for 15 minutes, which usually gives prompt relief.

He uses the static current in painful menstruation, amenorrhea, insomnia, malaria, paralysis, apoplexy, and almost all neurotic diseases.

He thinks one reason why we do not have malaria in mountainous countries is on account of the ozone present.

He does not explain how electricity cures all these diseases, but says that it does increase the vitality of the nervous system and circulatory apparatus, warms cold extremities and gives renewed vigor to the whole system.

Treatment of Epilepsy.

David Inglis, in the Physician and Surgeon for July, in speaking of the treatment of epilepsy says that after the bromides have been used for some time without benefit, acetanilid will have a good effect.

He uses it in 3 to 5 grain doses three times daily, and in many cases it has a most happy effect. Of course we should search diligently for any reflex cause of the fits and, if possible, remove it.

Auto-intoxication is an important element in some cases, so we should look after the organs of elimination, and the diet should be restricted.

In regard to the surgical treatment of this condition he says that it is of great value where there is some gross anatomical lesion such as a blood-clot, a spiculum of bone or

some such evident cause of cortical irritation, but aside from such cases surgical intervention holds out scant promise of relief.

The Treatment of Abortion.

Henry B. Stehman, in *Medicine for August*, lays down the following principles underlying the treatment of abortion:

1. The rendering of the vulva, vagina, and uterus aseptic, and so far as possible maintaining them so.
2. Arresting of hemorrhage, either by use of the tampon in the cervix or vagina, or by directly emptying the uterus.
3. In inevitable abortion, the ovum, or any part of the product of conception, should be removed as early as possible.
4. That intelligent curettage is invariably indicated wherever a vestige of placental decidua remains or any suspicion of infection is in evidence, and that a bacteriological differentiation is necessary both from the standpoint of prognosis and treatment.
5. When circumscribed local infection is a complication, evacuate the pus as early as possible and by the shortest route.

The Man with the Hoe.

W. L. Bullard, in the *Atlanta Journal-Record of Medicine for August*, writes of the danger to the eye while chopping with a hoe. Perhaps nearly every physician in the country has had some experience with the cases of eye trouble in which a foreign body is embedded in the cornea. Sometimes it is a rust scale from the hoe, and again it may be a piece of grit from the rock or earth.

Dr. Bullard states that in most cases it is a bit of steel from the hoe. The electro-magnet is a very simple and easy way of removing the foreign body if it be steel and has not penetrated too far.

It would be well for persons hoeing, especially in rocky ground, to wear plain glasses, and if they were smoked would protect not only from flying bits of metal or dirt, but also from the glare of the sun. An ounce of prevention, etc.

Treatment of Irritable Ulcer or Fissure.

These conditions do not usually get well of themselves, says Geo. J. Monroe in the *Cincinnati Lancet-Clinic for August 18th*. In the treatment of fissure we must overcome the commonly coexisting constipation by means of proper diet, plenty of water and regular visits to the closet. Cascara, rhubarb, licorice powder, and enema may be used. The fissure should be thoroughly cleansed and nitrate of silver, ten grains to

the ounce, applied. Five or six applications every second or third day will usually cure.

In irritable ulcer we must resort to surgical means as divulsion and cutting slightly through the fissure. The fingers are the best divulsors. After the sphincter is dilated the knife is drawn lightly through the base of the fissure in two places, the bowels are kept quiet for two or three days and if there is any delay in healing the nitrate of silver can be used.

Unna's Dressing for Chronic Ulcer of the Leg.

R. S. Michel, in the *Chicago Clinic for August*, strongly recommends Unna's dressing in the treatment of chronic ulcers of the leg.

It is prepared thus: Take of water and glycerine, each ten parts, and of gelatine, and white oxide of zinc, finely powdered, each four parts. The gelatine should be of the best quality. Dissolve the gelatine in the water by means of a water-bath. While hot add the glycerine, and finally the oxide of zinc, stirring vigorously and continuously until cold. It is somewhat difficult at first to prepare it well, but with a little experience the art of doing so is readily acquired.

Prepare the leg by washing it thoroughly with soap and water. Carefully dry it, and rub it with Alcohol. Then the "paint," prepared as above, and having previously been melted, is to be applied to the leg with a paint brush, just as you would apply paint. Paint over the ulcer, paying no attention to it. Leave out the toes. Extend dressing nearly to knee. Keep the paint hot while using it by putting the vessel in which it is contained into another vessel containing hot water,—an extemporized water bath. Stir from time to time, in order that the mixture may be homogeneous. After the leg has been thoroughly painted, apply an ordinary bandage. The bandage should be two or two and a half inches wide and made of firm but coarse material, with open meshes. The painted surface must be evenly and accurately covered, but the bandage must make no wrinkles or reverses. This makes it necessary to put it on in pieces. Let the bandage take what course it will, and when it cannot be applied further without making a wrinkle, cut it off and start anew. Keep on in this way until the whole painted surface is covered with the bandage, being careful to close in the heel and ankle joint well. Apply to this bandage another coat of paint, just as was done in the first place to the bare leg. Then

apply another layer of bandage, fortifying any weak spot with an extra piece of bandage, and more paint, so that there is exerted an even pressure all over. Then another coating of paint and bandage. The dressing should be from three to five bandages in thickness. Complete the dressing by giving the last bandage a good coating of paint. For a few hours the completed dressing is somewhat sticky; so it is well, for the sake of cleanliness, to cover it with an ordinary roller, which may be removed later.

The essential points to be remembered in applying the dressing well are; to make it fit firmly and evenly all over; it should fit like a glove; do not try to put on too long a strip; use plenty of paint; leave no weak spots.

The dressing should wear from four to eight weeks. Should it become loose from a diminution in the size of the limb, remove it and apply another. As ulcers of the leg are usually accompanied by a swollen, or oedematous condition, and as this condition rapidly diminishes under this treatment, the dressing may need frequent change. Should the ulcer secrete pus, rendering the use of local applications desirable, a wet spot will make its appearance on the dressing over the seat of the ulcer, within a few days after its application. In this case a fenestrum may be cut through the dressing sufficiently large to expose the sore.—Through this hole the necessary application can be made, and the fenestrum closed evenly and nicely with cotton, or gauze, held in place by means of a bandage. The application may be euophen, iodoform, boracic acid, or whatever cicatrizing is preferred. As the ulcer rapidly becomes smaller, it is well to make the fenestrum only large enough to expose it.

This plan of treatment is applicable to all ulcers of the leg, from whatever cause they may be produced. In some cases in which there is *great varicosity*, ligation and excision should be done first. If the ulcer is syphilitic, the constitutional treatment should be conjoined.

It is also applicable in many cases of chronic eczema, and to cases of oedema from whatever cause. In cases of synovitis, or chronic sprain, in either the upper or lower extremity, it can be used to secure fixation of the affected part. This it accomplishes nearly as efficaciously as, and much more agreeably than, plaster paris.

The dressing can be made to answer other indications than those enumerated.

We trust our medical friends will give this plan of treatment a trial.

Vaginal vs. Abdominal Method.

According to the American Practitioner and News for July 1st, L. Gustave Richelot offers the following conclusions:

In uterine fibromas, the two methods abdominal and vaginal have an equal value; each one has its indications, but the upper route is the most often indicated, and vaginal hysterectomy can no longer, to-day, claim the same superiority as formerly.

In cancer of the uterus, vaginal hysterectomy is superior to every other method; it permits us to obtain, in a proportion of not less than ten per cent., prolonged survival, and even cures which seem to be final. The best operation is that which precedes cancerous infiltration, and not that which pretends to pursue it through the pelvic cavity. Abdominal hysterectomy is an extra resource in a very limited number of cases, but applied deliberately to invading cancers, it is an imprudence, and for limited cancers it is an illusion.

In pelvic suppurations the conduct to be used is variable and responds to complex indications; improvements of technique have given a great value to the supra-pubic method, which ought to be preferred in certain cases. But most frequently, when the surgeon is sure of his diagnosis, if he wishes to give his patient the greatest security and the least suffering, vaginal hysterectomy is the method of election.

The Leading Editorials of the Month.

What is to Become of the American Republic if American Women Refuse to Become Mothers?

According to the Georgia Journal of Medicine and Surgery, maternity is now considered undignified, a menace to a wife's liberty of folly, an unwelcome invocation of duty and responsibility by the majority of American women, especially those who are in society, or those who are making an effort to get "in." So strong is this unhealthy sentiment that the gynecologist is eagerly sought and urged to do an operation, which makes maternity impossible, and he is the prosperous, busy doctor who registers a twenty thousand dollars annual income.

The individual woman is autocrat of her own decisions, but when she takes the vows of the marriage law, however broad or simple its words, there is an injunction of motherhood. The woman who unites herself in marriage to a man and then refuses to be mother to his children—unless there are moral, physical or hereditary laws—

which cannot in justice to the unborn be propagated or continued in the human race, has obtained a husband, a man to support and protect her with the ways and methods of a common cheat.

The man and woman unworthy of being father and mother should not marry. Let their taints, whether of blood, body or morals, die with their own soul's death. This is what a true philosopher would say was justice to the human race, and a poet would call it heroism. Justice or heroism demands the same strength within the ego's soul.

The American home is no longer a palace of love in the valley of peace, music and laughter. The successful American man and his wife have apartments in some fashionable hotel or boarding house. In summer the wife goes to the mountains or seashore for a change of air, and the husband stays at home and works for the money to pay his wife's summer bills, and create his pleasures with free thought and license. Every law of earth and heaven whispers maternity—creation. Every religion away back into the chaos of time, down to the Christian one of to-day has made motherhood divine, sacred. The Hebrews of to-day crown a mother with the glory of man's greatest honor. The Catholic faith looks upon motherhood as the divine blessing of God. The strong family ties of love and loyalty of the Hebrew race is the secret of their wonderful prosperity and strength in every community in which they live. It is the link which binds all Catholic families so closely together that no adversity, no trials, no shame can shadow their allegiance.

The repudiation of maternity in a wife is the outcry of the selfishness of her own heart and nature. She wishes to receive all and give nothing, not even the milk of her breast, in payment for a babe's sweet-angel-lit smile, a cherub's dimpled cheek, and the soft curves of its little body, nestling in all the faith that comes with it from God.

A woman who denies herself the kiss of her own babe's lips, does not realize what a pearl of everchanging beauty, what an infallible elixir of joy, of pride, of happiness she has allowed selfishness to chase away.

The history of the great men and women of the United States demonstrate that they were all of large families. They lived not in the constant thought of self, but in the intermingling of thoughts, the concessions, the mutual considerations and giving which are inevitable in large families.

The United States is the greatest and most powerful republic the world has ever seen, because men and women during the

past century married with the impulses to be father and mother to girls and boys, with no protest against nature. Whether in the barren hills of New England or on the frontiers of the Western States, these men and women built a hut or house and called it "home," and lived within it with the holy reverence and love that such men and women give to the tabernacle in which their children are born.

Now all is changed. Several decades ago large families, 6, 8, 10, or 12 children were common and oft repeated, but to-day such numbers are not in evidence—small families, 2, 3, or 5, the latter figure very large for the average American family. Why is this? Only one reason, women are learning how to avoid maternity. The rich American man's wife scorns to be a mother. She leaves the responsibility of motherhood to her French maid, her Irish seamstress, German washerwoman. And when their sons are noted men, the American barren wife declares with contempt their humble origin. The barren American wives so overwhelming in number, are fit ciphers of society. They represent nothing but their husband's ability to pay their bills. It has been said "that nature is always right." It is nature's wise laws to let foolish, selfish women end in their own death, their unenviable heredity of mind; but the question arises, "What is to become of the American republic if America ceases to have American families and American homes?"

There is but one answer: "The foreigner, with his large families of boys and girls, with his prejudices and royal reverence for royalty, will govern the United States with the right of franchise—legislative and judicial laws."

Barren wives sooner or later, moan out their own folly in sighs, pains, and aches, and often tears of regret. When the frills of a tailor-made, the rustle of silken petticoats, the chattering of women at 5 o'clock teas, the dirge notes of would-be singers at musicales fail to enthuse the senses, then must come to the barren wives the thought that "may be" the sweet cooing of a babe would be sweeter music than the clang of a piano out of tune, or a tenor with a cracked voice. When she looks at the rest of the women like herself at the eating trough of the boarding house or hotel, her heart whispers, "Would it not have been better, nobler in my duty as a wife, as a woman, to have been a mother, and in a home, however modest, made a fireside of peace and content and comfort and happiness for myself, my husband, my children?"

When a barren woman reaches these con-

ditions sometimes it is too late. The May tide which carried into her lap the bright dancing love-lit waves of promised happiness was thrown back into the sea of fashion with the foolish cry, "I want no children."

The woman before or after marriage, who makes such a statement, must realize that she is untrue to every law of justice to herself, physically, socially, and the impulses of home and family, and untrue to the God who created her to be a mother.

The woman who is a mother, whether she has one or ten children, in equal conditions of life and surroundings, is invariably a healthier, happier, more cheerful woman than the woman whose cry has been "I want no children!"

The woman with a large family may not have the amount of money nor the desire to lead a society woman's life, but she is always better contented with her life. The kisses of her sons and daughters are sweeter to her than all the operatic airs ever written, or all the high teas ever given. American women must be mothers. Their dignity and honor pleads it. Their old age beseeches it. The honor, strength and existence of the grand old republic of the United States demands it.

The Criminal Abortionist.

We believe that physicians, as a rule, come as near living moral lives as the members of any other profession, says the Mississippi Medical Record. Occasionally one gets into the ranks of the profession who would be better adapted to the companionship of the demons of perdition.

Language is inadequate to describe the blackness of a character, posing before mankind as a physician and a gentleman yet with his sounds, his catheters and his black, nauseating compounds is almost daily taking the lives of beings while yet *in utero*.

It is not a reflection on the medical profession that such men occasionally find their way into its ranks. This character is an incarnate fiend who comes in under a cloak and strives to live under one, although like the ass in the skin of the lion, some part of him at times is exposed to the view of man.

Sometimes they get so bold in their work of human-life destruction as to send their abortifacient prescriptions to respectable pharmacists and then become angry because the pharmacists refuses to fill them.

We can understand how a woman under some circumstances, who does not understand and hence can not appreciate the moral turpitude of infanticide might seek

the destruction of a fetus while yet in her womb, but how a man, educated in the laws of life can stoop so low, can become so black at heart as to deliberately and without cause, for a paltry sum of money, take the life of an innocent unborn human being is beyond the scope of our comprehension. No wonder such men usually live apart from their fellows; no wonder they sulk and grow wicked and selfish and die accursed. If a physician of respectability points out this demon, whose crimes, if known to the law, would break his neck a hundred times, the whining cry of persecution is immediately raised.

Most of us who have practiced many years have observed cases somewhat similar to the following: A woman, it may be an unmarried woman, or a husband, or it may be sometimes a *sweet heart* goes to a physician, Dr. C., his or her regular medical attendant and adviser and states the case and finally asks Dr. C. to do the bloody deed, if he is allowed by the doctor to go that far. Dr. C. refuses in a modest, firm manner and may proffer a little advice which is usually not taken. In a few days or weeks this woman is missed from her accustomed haunts. It is learned that she is sick and being attended by Dr. D. The neighbors are surprised at the change of physicians. They had often heard this woman say that Dr. C. was one of the best physicians in the world, and Dr. D. should not treat a dog of hers. The neighbors can not understand, but Dr. C. knows why he has been discarded, and the secret is locked in his breast. He is the only person in the wide world who knows of the heinous crime besides the participants in it and his knowledge is not such as would break the criminal's neck if given to a jury as evidence. The woman is soon out and goes her way, and is generally a pretty rough one, and the criminal goes his way which is the seeking of new fields and richer ones. In a few years he becomes suspected by the community as a professional abortionist and those characters who seek to have such work done no longer go to their regular physician but seek Dr. D. in the beginning.

Such a man will steal; such a man would rob you if he had an opportunity; such a man will lie; such a man would stab you in the back, under cover of darkness or commit any other crime. Has he not already committed hundreds, compared to which those mentioned above pale into insignificance.

This crime is becoming more common. The great question that confronts the American people to-day and must be answered by them sooner or later is "*What*

is the remedy?" It is a question for sociologists and statesmen. It is one that is destined to force itself for consideration by them. The medical profession, in a way, knows of the existence of the crime. Every reputable physician knows by sight, these excrescences on the body medical, but they are powerless to apply a remedy. The sociologist of to-day, or the sociologist yet to be, may find a remedy and direct its application.

The Unseen Blessings of Selfishness.

According to the Cleveland Journal of Medicine, the condition of affairs in India is to the medical mind an even more interesting one than are the more purely political developments now going on in China. The famine has, as usual, been succeeded by a widespread outbreak of cholera, small-pox and diarrhea. All this may be regarded as Nature's method of solving the terrible and constantly increasing problem of over-population, which has been much intensified by the enlightened measures of the English government. If such famines and such diseases could be entirely done away with, these occasional times of acute starvation would in time be replaced by a steady starving process, a thought from which very little apparent comfort can be extracted.

The interesting statement is made that there is plenty of grain in the country, but that it is held by greedy merchants in order to command a high price. An intimation is made by the daily papers that the government should regulate the price of grain and by putting pressure on the merchants force them to part with it. This seems a most humane and necessary measure. It is obvious that the merchants who put the highest possible price on grain when people are starving for it are actuated by purely selfish motives. The fact is, however, that such action, like many another—the product of purely selfish motives—is strongly conservative, and any attempt to check it by law is disastrous in the extreme. It has been attempted repeatedly, and the seasons for its failure are very forcibly pointed out by John Fiske in one of his essays. When grain becomes scarce, the natural tendency is for the price to rise. People are necessarily more economic in its use and the resources of the country are husbanded to the utmost. The case is then exactly parallel with that of ship-wrecked people, or of the Greeley party with a limited food supply. If holders are compelled by law to sell at a low rate the people entirely fail to realize the necessity for economy, existing supplies

come rapidly to an end and the condition of the country is ten-fold worse than it would have been without any meddling. It is to be supposed that the English government is more far-sighted than our statesmen of the yellow press, and will do what it can directly to relieve the untold misery of their subjects rather than by interfering with the rights of one class of the community to intensify the misery of the rest.

Delirium Tremens and Pneumonia.

According to the Quarterly Journal of Inebriety, the sudden appearance of delirium in persons who use spirits to excess or in moderation, should suggest a careful examination of the lungs to ascertain the presence of pneumonia. If the delirium should increase and develop the characteristic symptoms of delirium tremens, the possibility of pneumonia also increases. In many cases pneumonia is not recognized until the last stages and a short time before death, and yet it has been coincident with the first outbreak of the delirium. The sudden appearance of delirium in a moderate drinker, with high temperature, comes frequently from pneumonia. The obscurity of the diagnosis should increase the vigilance of examination and the expectation of finding this lesion of the lungs. Delirium of an active, busy type, associated with muscular trembling and delusions of fear and injury, also sudden profound delusions of a melancholic form are often associated and seemingly come from pneumonia. Alcoholic tremens and delirium tremens often end fatally from pneumonia. A careful examination would have revealed pneumonia, at the beginning, it having been masked by the mental symptoms, and only recognized in the stages. Cough and sputa are often absent, and only increasing areas of dullness with obscure rales are noticed. The delirium of persons who use spirits in any form cannot always be differentiated from that which appears in pneumonia. In the former hallucinations are more prominent, but when they are associated exhaustion is very marked. In the treatment no form of spirits can be given with safety. The old treatment by spirits to prevent collapse is fatal by adding new toxins and lowering the vital forces beyond the point of recovery. No form of delirium in a drinking man should ever be treated with spirits. Eliminative measures and nutrients are called for. The fatality of many cases of pneumonia among drinking men is traceable to the delusions of the tonic and stimulant action of alcohol. In delirium tremens the treatment is still

urged to give spirits to prevent exhaustion, the same advice in pneumonia to avoid collapse, is almost always fatal. If the latter occurs in previously drinking men all forms of spirits are to be avoided. In delirium tremens all spirits must be withdrawn at once. The conditions present are those of starvation and poisoning, and spirits are not only poisons but create sources for the formation of other poisons. The mortality from delirium tremens and pneumonia will be greatly reduced by a clearer recognition of the causes, and a more rational application of means and measures of treatment.

Teach Physiologic Truths.

With the increased precision in diagnosis of to-day, obtained by improved instruments and additional scientific knowledge, especially in microscopy and bacteriology, while sanitary science is acknowledged to be of prime importance, sufficient stress is not laid upon a proper observance of physiologic laws for the prevention of disease, says the New Orleans Medical and Surgical Journal. The physician does not teach enough; in fact, he does not think enough to be able to teach properly. As an illustration, take the sexual functions: how much mental anguish and physical suffering result from the fact that as children, as adolescents, even as parents people are left untaught as to the proper rules to observe and the penalties incurred for their non-observance!

Human beings are left in utter ignorance as to the laws of the highest of all functions, that of reproduction. Young men and young women are expected to remain moral and healthy simply because it is supposed they may remain ignorant as to means of becoming vicious and diseased. With the women, who are inherently and naturally better and who have some safeguards thrown around them, results are not so disastrous, but what physician does not see over and over again the damage done to our young men by this policy or, rather, the lack of it?

Adolescents are told by their elders who know no better that it is necessary to indulge in sexual intercourse in order to be properly developed and to be manly. Thus a course of life is entered upon which can only lead to evil. As a result of infection or excess many become physically impaired, the damage extending to their progeny, if they are able to have any. All have reason to suffer mentally when the time has come for them to unite themselves to a pure woman for whom they entertain proper affec-

tion and esteem. Even if they have escaped all bodily harm, what would they not give to undo all that makes them feel so unworthy of their mate in at least this regard?

The remedy lies in great part with the medical profession. Let us take every opportunity to correct the wrong impressions that so generally exist concerning sexual and other physiologic questions. Let us do so systematically, by lectures and writings at schools and colleges. Let us do it whenever the opportunity presents, at patients' homes and in our offices. It will take time to undo the evil of generations, but fortunately the good seed also grows, if not as fast as the bad.

The Etiology of Malaria.

From all accounts of the work done in the study of the etiology of malaria in the past two years, we have reason to expect to see the dictum set up that the mosquito is the only agent in the transmission of malaria, says the Memphis Medical Monthly. At the recent meeting of the American Medical Association, all the papers in the symposium took cognizance of this, and four of the six dealt directly with the subject. All of these had done some work in this field and all were ready to admit that this "ultra" inference was the most rational one and most in keeping with observed facts in malarial sections. Some years ago a paper appeared in the Monthly by Dr. Battle, of Riverside, Ark., describing a "non-malarial refrigerating ventilator." He stated that the only time they had malaria in the house since the erection of his ventilator was after his wife had closed the screens for some reason, and she was attacked with a fever from which she died. Other members of the family were also taken sick at the time. This experience explains more forcibly than any experiment made, because it was made without reference to the mosquito, and hence without bias. Mosquitos do not rise very high above ground, except in the neighborhood of trees, where they may move up by degrees and where they are sheltered from the sun. They correspond in every behavior to the miasm of malaria, i. e., do not travel against the wind, do not rise to high altitudes except along gentle slopes, are abundant in season of miasm, are cleared away by rain, and swarm principally at night; at any rate they shun daylight. Two physicians in a town we recently visited had opposite views regarding the transmission of malaria; the one drank only boiled, filtered and iced tank water, used no netting,

and had one or more members of his family in bed all summer; the other drank "pump" water and used screens; no fevers occurred in this house.

The early spring malarials are relapses from the previous season; the cases of "ice cream," "watermelon," "puerperal" and "surgical" malaria are simply precipitations of a paroxysm in cases of latent infection. Some of the "pump water" malarials seen by the writer at St. Joseph's Hospital this year were intestinal infections yielding to appropriate treatment for bowel trouble, and no further paroxysms developed, though no quinin was given.

The German East African Malaria Commission, as also the Italian writers, consider the matter settled and not open to further discussion. Since the malarial organisms have no mechanism for penetrating vessel walls, and the drinking of dew, ditch and marsh water has in all experiments failed to produce an infection, whereas the injection of malarial blood will induce an attack of the disease, and the malarial plasmodium has been found to undergo changes in the anopheles or malarial mosquito, and subsequent exposure to such mosquitoes under conditions which excluded all possible outside infection produced malarial attacks, we are forced to the conclusion that this is the sole and only mode of transmission.

This opens up an immense vista of possibilities in the management of malaria. It also imposes a new responsibility upon the practitioners in malarial regions, for, since every case of malarial fever is a possible source of infection for others, means should be adopted to prevent mosquitoes feasting on an infected individual from inoculating another patient. This is not a fanciful sketch, as the following case will illustrate: A little girl in a certain Memphis family was taken ill with tertian malaria; the attending physician brought us some of the blood. Twelve days after (seven days for the development in the mosquito and five days for period of inoculation) the father had a chill; fourteen days later the sister had a paroxysm. Presumably she occupied the room only after the illness of the father, but the attendant is now out of the city and we could not verify this point.

It also becomes our duty to thoroughly cure our patients and call their attention to the fact that this is to prevent the spread of the disease. The flushing of small bodies of water in which the larvæ of the anopheles are found has also been suggested as a means of preventing malaria. It is strange that the Memphis city health authorities, whose duty it is to prevent the development

of diseases, should have thrown a dam across a branch of the bayou just north of St. Joseph's Hospital, making an ideal spot for the development of anopheles. We have been getting our supply there for some weeks.

The practitioners in the great Mississippi Valley should not be the last to take cognizance of the newer study of the etiology of malaria. The profession elsewhere looks to us for light on many questions of this kind, and it behooves us to be up to date.

Heredity.

The Medical Herald says that heredity may be regarded as that trend or attribute of the vital force in living matter whereby typical features of the body and mind of species and their varieties are transmitted from parent to offspring, whether plant or animal, with such certainty and exactness that a common observer can recognize the reproduction. The power that effects such transmission is necessary to the maintenance of specific differences, whether these pertain to plants or animals. The vital force possesses the attribute which secures to the life kingdom the immutability of species and the continuance of organic features and psychic traits that are observed to characterize varieties. And since variety is a modification of species, the difference must arise from a modified action of the attribute force, produced by external causes to which species may be subjected, either natural or artificial. But evidently such causes can do no more than modify the action of a natural or organic force to a greater or less extent, and for a greater or less duration. As no stream can rise above its source, so environment (which may be taken as including all modifying causes) can not effect any essential change in species, beyond such modification as constitute and characterize variety. While features of organism and psychic traits that distinguish varieties are transmissible with fidelity and apparent permanency, yet variety is preserved only so long as the organisms are kept under the action of the modifying causes; a fact that shows that variety is not species, because the essential and permanent characteristic of species is that of immutability. Hence specific features, traits and peculiarities are necessarily transmissible; otherwise there would necessarily be naught but confusion and disorder in the whole life world. The great differences that are oftentimes observed in the individuals of species do not in the least effect the distinguishing characteristics of species, or even of varieties. Such individual differences

are sometimes so pronounced as to be transmissible to immediate offspring, but such transmission may be held as purely accidental and hence evanescent.

Specificity of organisms is as absolute and complete as is that of elemental matter and its combinations. In inorganic compounds, uniformity is invariably under the same conditions. But this is not true of living organisms except as it respects specific features and peculiarities of the organism. A slight variation may result from accidental and transitory causes, the effect of which in no way modifies specific characteristics. Such variations result from the lack of sufficient resistance on the part of the vital force during the development of the embryo to the state of maturity. But such results are not transmissible. No modification of the organism can be transmitted, the cause of which does not impress itself on the vital force or matter of the organism. The state of vital matter in species is native and permanent; that of variety is continuous only so long as the causes that produce modification continue to act.

Environment may be taken as including all causes that can effect a modification in a living organism to the extent of giving rise to a variety of species; effects which continue permanent only so long as the variety is kept under the influence and power of the causes that brought about the variety. Under such influences, variety continues as though it were a species. In such cases the features and peculiarities, characteristic of the variety, are transmitted with those that characterize the species. Hence, the various breeds of plants and animals that constitute varieties of species. But though variety continues through many generations, and therefore seem as permanent for the time being as do species; yet experience has shown that variety continues only so long as it is kept under the influence and power of the causes and conditions operating to produce them. Losing the characteristics of the variety, only those of the species remain and continue.

The heredity that is of practical importance to the physician, has sole reference to the transmission of acquired traits, trends, and peculiarities of the organism, which have their origin and fixedness in morbid causes or agents. Normally, species are free from such states on conditions of the body. Only individuals and families present morbid trends and peculiarities, the causes of which so impress the vital force or matter of the organism as to give rise to such a state and condition of the body as to render the abnormal trends and peculiarities transmissible from parent to offspring, and

in some cases as, in tuberculosis, to give rise to characteristic features of the entire organism. Climate and its attendant forces can produce in a living organism such morbid changes and vital trends as will implant in an organism morbid trends and conditions that are transmissible to offspring. Climate or its forces can also free an organism from diathetical morbid effects, and restore the family of the individual to normal state of its ancestors. A marked illustration of this fact we have in the cure of tuberculosis by climate, and in its production in a non-tuberculous animal when a tropical animal is taken to a higher latitude.

It is also a well known and recognized fact that depraved physical and social conditions work morbid conditions in individuals and families, that engender diatheses. The fact is that all abnormal states or conditions of the human body are brought on it by morbid agents, operating, it may be, through generations. The body being naturally normal cannot become abnormal except by the influence of morbid agents. When such influences give rise to a diathesis, the whole organism comes under the determining or predisposing influence of a peculiar and characteristic morbid trend implanted in the vital cells of the whole organism, though more pronounced in some than in others.

The human race is capable of existing and living fairly well, comfortably and useful to themselves and others in any of the accessible latitudes; but individuals and families give way, in a certain degree, to the influences that characterize a new locality. In this respect, man differs from the purely animal only in degree of endurance and artificial adaptation. But since mankind is divided into several marked varieties, so fixed as to be transmissible while confined within their respective limits, yet susceptible of fruitful miscegenation, with one exception, intermarriages are not unfrequently attended with deterioration of the offspring, and sometimes with an amelioration. While this is true of races, it is also true of families of the same race, tribe and family. Such effects are doubtless limited to the animal organism. The reproductive system does not extend to, and include, the psychic personality of man. The conclusion is also evident from the fact that like results attend interbreeding of animals. So it is evident that intermarriage between parties of abnormal vitality leads to the productions of organisms whose vital force and vital matter present a weak resistance to the force of morbid agents, whose vitality, indeed, cannot supply the neces-

sary force to vital organs to give and maintain a vigorous condition of the whole body. Such organisms are a prey to morbid influences, which gradually undermine the resisting force that exists and lead finally to the establishment of diatheses which become the soil, as it were, for all morbid forces.

All diatheses are abnormal and acquired; but when established in an organism, they become transmissible, so long as intermarriage does not prevent a resisting and correcting force which is able to overcome the force of the diathesis on the offspring. In such cases, the opposing forces operate in contrary directions. The stronger may show its dominance in the offspring, especially if the normal force is continued dominant to a later generation. It is thus seen that transmissibility effects changes in both weak and strong organisms through the agency of a mixture of bloods.

Myxedema and Cretinism in their Milder Forms.

According to the Medical News, thyroid therapy in myxedema and cretinism has been a bright chapter in modern medicine, for it is rare that a disease presents itself in a typical manner and a cure is effected with so much certainty as in case of disturbed metabolism from thyroid insufficiency. The researches of Hertoghe, however, go to prove that the real scope of the discovery has not yet been thoroughly appreciated; that while myxedema forms a symptom-complex not to be forgotten, the overdrawn text-book type of the disease is reached by only a minority, and the intermediary stages are rarely recognized and treated. The thyroid stands in intimate relation with all organs of the body, and the symptoms resulting from its atrophy often concentrate themselves upon the one or the other organ without, however, leading to a general deterioration of mind and body so characteristic of myxedema.

The relation of the thyroid to the female sexual organs is especially pronounced; menstruation is attended with a transient or permanent hypertrophy of the thyroid; with pregnancy also there is an increase in volume; menorrhagia up to almost continuous hemorrhage, to be followed later by amenorrhea, is an almost constant feature of myxedema readily yielding to thyroid treatment, and during the nursing period the latter increases the size of the breasts and the secretion of milk. It is noteworthy that excessive menstruation from other causes, as well as from habitual abortion, often disappears after a course of thyroid extract. It

seems, indeed, as if the development of the sexual organs and that of the thyroid gland, especially in the female sex, go hand in hand.

It would appear at first sight as if serious obstacles would be encountered in the diagnosis of what may be called benign hypothyroidism or partial myxedema, but these are materially diminished if the eminently hereditary character of the condition be borne in mind. Not only is it necessary to ascertain the exact size of the gland in the patient and his immediate relatives, but all other organs liable to be involved must be subjected to close scrutiny to detect any slumbering taint; the early life, puberty, menstrual history, pregnancies and puerperia of the mother and the condition of health of the sidelines of the family must be carefully reviewed. As a second means it is well to compare the intermediary stages in a fully-developed myxedematous patient on his way to health with a suspected case, for a close correspondence of symptoms will thereby be unveiled, and, thirdly, the therapeutic test which permits of a cure or a return of symptoms *ad libitum* will prove of diagnostic value.

The hypothyroid patient generally belongs to the female sex, no doubt since the thyroid here suffers more drain from the greater complexity of woman's sexual phenomena. Extremely insidious in onset, the patient generally does not become aware of the slow undermining of her health, the more so since her relations are troubled with the same or allied symptoms which make her forget that what she feels is not part of her normal state of health, and, therefore, she complains but little. Alcoholism, poor social surroundings, intermarriage, venereal infections, and excesses of all kinds form the starting-point, for, whatever the malignant influence be, it first and foremost attacks the thyroid and with the advent of pregnancy, deprivation or other drain, a new factor is added which unreined exerts its ravages on a weakened soil. The patients often appear prematurely aged; canities and later alopecia, especially of the eye-brows, are noted manifestations. All epidermal structures seem to be particularly vulnerable, so that malformation and caries of the teeth and spongy gums are not rare. An examination of the mouth shows enlarged tonsils and a hyperemic pharynx. The nasal cavities are narrowed and adenoids can be found in all degrees. Headache, migraine, tinnitis aurium, a dampened voice, and peculiar illusions of sight and hearing are present.

Turning to the sexual organs, it may well be said that many of the disturbances dur-

ing pregnancy, so common as almost to be considered physiological, may be ascribed to lack of thyroïdin in the system. Nor need one search further for the cause of the lassitude and loss of mental acuity which mark the period of lactation in so many patient. The author is even inclined to view the origin of retroflexions, myomata and excessive postpartum hemorrhages, in the same light. The patients live in an "eternal winter" for their bodily temperature is much diminished; hence come articular and muscular rheumatism, a constant complaint of soreness and cold feet. Premature senility of the vascular system leading to varicocele and dilated veins, an emphysematous condition of the lungs with a feeling of oppression and dyspnea, palpitations of the heart, a tendency to portal congestion and gall-stone formation, and obstinate constipation persisting from infancy to old age, general depression of mind with irregular and unrefreshing sleep—all these symptoms portray a condition of chronic illness and pitiable suffering. The picture is complex but the moral evident. The physician who keeps the possibility of thyroid disease ever in mind will become more and more imbued with the prominent part it plays in medicine and will, by careful analysis of symptoms, very often be able to resort to organo-therapy to alleviate suffering.

The Utility of Alcohol as a Disinfectant

According to the Journal of the American Medical Association, it has been much a matter of discussion whether alcohol is a bactericidal agent, and if it be, in what way it exerts activity. When alcohol was first proposed for disinfection of the hands it was thought to be effective by acting as a solvent of fat, and thus preparing the way for the necessary intimate contact between the antiseptic solution and the epidermis. Later, bactericidal activity was ascribed to alcohol, and this was thought to depend principally on its dehydrating property. There are some observers, however, who believe that alcohol possesses doubtful, if any, antiseptic qualities. For the purpose of reaching an independent conclusion on this subject, Salzwedel and Eisner undertook an experimental investigation, as a result of which it was found that a number of alcoholic solutions examined exhibited varying degrees of disinfectant activity, as compared with other well-known antiseptics, such as mercuric chlorid, carbolic acid, lysol, sapokresol. Silk threads, with dried bacteria, were employed as test-objects, the

conditions encountered in actual practice being duplicated as nearly as possible.

It was shown that alcohol is with most certainty destructive to staphylococci contained in pus dried on threads, when employed in aqueous solution with a specific gravity of .902 at a temperature of 19 C., that is, about 55 per cent. (by weight) spirit. The disinfectant activity of this solution was not quite equal to that of one to one thousand mercuric-chlorid solution, but, on the other hand, it was not less efficient than 3 per cent. solution of carbolic acid. Lysol and sapokresol in one per cent. solution, as well as lysoform up to 4 per cent. solution, were always less active than mercuric chlorid, alcohol, and carbolic acid. It was found that alkalinized spirit is more effective than ordinary alcohol in its action on dry threads, while the addition of mercuric chlorid or carbolic acid had no distinct effect in increasing the disinfectant activity. A generous coating of fat on the threads seemed to favor, while a thin layer rather retarded, the action of the disinfectant. The application of gentle heat—30 C. or below—was thought to facilitate the disinfectant power. The time required for the manifestation of this effect varied with the period of desiccation to which the threads were exposed, the bacteria in fresh pus, for instance, being destroyed by mercuric chlorid, alcohol and carbolic acid in five or six, or even in three, minutes, while if the threads were exposed after an interval of weeks or months, disinfection was, as a rule, not accomplished in less than from eighteen to twenty-four minutes. The results were equally bad when the threads were prepared from pus that had itself stood for a long time. These effects are attributed to inspissation of the medium containing the bacteria, retarding access of the disinfecting agents. Similar results were obtained with bouillon preparations made in the same way. Bacteria dried upon threads and placed for a long time in pure alcohol, and in some instances kept besides in the thermostat or the autoclave, retained their power of multiplication; but bacteria in a moist state, on the other hand, were destroyed in a short time by absolute, cold alcohol. This difference in effect is attributed to the desiccating and coagulating action of alcohol.

It appeared that the spirit capable of penetrating the bacteria with destructive effect should contain from 50 to 55 per cent. of alcohol by weight, although weaker solutions are not without a deleterious influence on the bacteria. The development of staphylococci was inhibited by the addition of 70 per cent. of alcohol by volume to the

nutritive medium, the phenomenon being analogous to the process of alcoholic fermentation, where the yeast is destroyed when the percentage of alcohol reaches a definite figure. It was found that the addition of an acid, such as boric, or hydrochloric, to the alcoholic solution augmented its disinfectant activity, but it was then discovered that the reaction of the threads was neutral or alkaline.

From the experiments outlined it is concluded that in addition to its desiccating action, alcohol exerts an especial toxic influence on bacteria. Although this toxic effect is much less than that of mercuric chlorid and carbolic acid, properly applied, it is, with regard to its disinfectant power, comparable with the latter two, occupying an immediate position between them.

Sporadic and Epidemic Dysentery.

Recent war experiences throughout the entire world have shown that the mobilization of large numbers of troops in warm weather almost inevitably give rise to epidemic dysentery says The Medical News. In the past it was easy to dismiss any question of obscurity in the etiology of these outbreaks on the theory that insanitary conditions "bred disease." Now we know that disease does not originate *de novo* at each fresh epidemic, but has somehow been preserved, perhaps in some insidious modified form, from preceding epidemics. To discover the methods of this preservation of disease from epidemic to epidemic is one of the most interesting problems in modern medicine. Its solution for any particular affection means, as regards prophylaxis, an immense gain in our armamentarium against disease.

The question of the conservation of dysentery by the occurrence of sporadic cases does not seem very difficult. Series of cases of the disease occur in many different parts of the country every year. It probably would not be difficult to trace the chain of connection between these various groups of cases. In some of the jails, asylums and work houses of the country there occurs an epidemic of acute dysentery of an especially virulent type. Such good authorities as Flexner and Osler seem to incline to the belief that these cases of acute dysentery are due to the same microbic causes as the acute dysenteric affections that have been studied so carefully of late among our troops in the Philippines and the West Indies. If this be true, then the explanation of the serious outbreaks of dysentery in military and other camps is not far to seek. Acute dysentery, even

that known as tropical dysentery, is therefore endemic among us, although it occurs in mild form except under especially favorable conditions.

Dr. Flexner has shown that the acute dysentery at Manila is probably due to a specific bacillus isolated by him. Musser has shown that this same bacillus is the cause of dysentery in Porto Rico; at least the blood of a patient suffering from Porto Rican dysentery will agglutinate the bacilli in a drop of pure culture of Flexner's bacillus, and this is generally considered to be a crucial and conclusive diagnostic test. If by the same method it could be demonstrated that most of the cases of acute dysentery that occur throughout the country were due to this bacillus, a distinct advance in pathogenesis would be chronicled. The agglutinative method of investigating disease has become so familiar of late years because of the universal adoption of the Widal test for typhoid fever that this investigation would not be difficult. Boards of health throughout the country are in a most favorable position for the taking up of the serum diagnosis of dysentery. Let us hope that the opportunity thus afforded to add to the good work already being done by boards of health will not be neglected, and that even this present summer will see the collection of a set of definite statistics in the matter. If this point can be established it will place the nosology of endemic dysentery on a reasonably rational plane.

The Public School Problem.

The Physician and Surgeon says that our public school system is imperfect is strongly indicated by the spirit of dissatisfaction and the words of criticism that are becoming daily more vigorous and sonorous as this subject is bandied about by tongue and pen. Since the introduction of scientific studies in the curriculum of the common schools the time-honored classics and mathematics also have been branded as it were with a death's head to signify their worn out and profitless resources for knowledge and mental discipline. Education itself has acquired a new meaning. The Spencerian idea of education has taken hold of many men as a result of which the curricula of most modern schools have already evolved from one frill to another until their resemblance to those of a generation ago is not plainly seen. Were the parents of the nowadays school boys and girls to closely observe the kind and amount of stuff which some would thrust upon their growing minds, in more than one sense

they would be made to feel that the boy is father of the man.

The world is growing better. Men are wiser from one generation to another. Nature is, however, the same through time, and our minds are finite. Custom rules our inclinations and determines what our education shall be. This is the age of science. The tendency in all education and in all work in this day is to make scientists of us all. From the culture of the mind and the heart and the inculcation of intellectual power and virtue we have turned to the training of the eye, the ear and the hand in the perception of lesser life, the gossip of the day, the electric spark, and the places of the strong literary characters of a century and more ago have been left unfilled. The old scholastic style is now obsolete but neither false nor shallow. Custom has ordained a different type and we are subjects, willing or unwilling. Let us grasp the new and true with a glad heart and a ready hand but never neglect that which the repetition of history has shown to be replete with wisdom and educational power—the classics.

Scientific Diagnosis.

According to the St. Louis Medical and Surgical Journal, the practice of medicine is not the hap-hazard, guessing matter which it was some years ago. Diagnosis is becoming a more and more refined art daily. The practitioner is no longer satisfied with a stethoscope and a clinical thermometer as his sole armamentarium. His chemistry is no longer limited to the nitric acid test for albumen in suspected urine. To-day he is expected to be a thorough and conscientious investigator of all the symptoms presented by his patient. He must be fully equipped with all the modern instruments of precision in the making of a diagnosis. To-day it is requisite that positive ante-mortem investigation be made which, for exactitude, may vie with the best post-mortem findings.

Bacteriology, hemology and other investigative branches must be continually utilized. The microscope must be used as often as the pen is put to paper, and sometimes oftener in some cases. Every effort is being made to place medicine in such a position that it may claim its proper rank among the sciences. We have not yet attained this point, but we hope to do so, and that in a comparatively short time, if the strides made in the past ten years are any indication of those which will be made in the next decade. The younger genera-

tion of physicians has developed many original investigators, and it is to them that we naturally turn for the best work which the future promises. And we know that they will not disappoint us, if we are to judge from the work they are now doing.

A scientific diagnosis and exact and scientific methods of making one are now expected by patients. They will suggest in the fear that unless some unusual means be used their cases will be neglected. But in most instances these requests are unnecessary. Some pretence is made at a scientific diagnosis, whether it be such or not. And it is right here that great harm is done to the honest and intelligent practitioner. His work is thorough and not appreciated. Pretended examinations of the blood and for bacteria are made by some in a moment, and a very learned diagnosis made. When the honest investigator asks for a day or two to make his examinations he is branded an ignoramus. Still an advance has been made in the education of the laity, and it will soon learn the necessity of time in the formulation of a diagnosis to establish which the more complicated methods of research are necessary.

Melancholia and Suicide.

According to the Kansas City Medical Index-Lancet, few persons outside of the medical profession and unfortunately many within its ranks fail to realize the great danger of suicide in cases of incipient melancholia. In spite of the numerous examples daily, and the sad details usually connected with their sudden suicide, the fact remains that this form of death is on the increase. It is even more lamentable when we remember that in the majority of cases timely appropriate medical care and attention could easily avert the disaster.

Of all complications liable to melancholia or depressed states of feeling suicide is the most constant and common. The rational mental condition of the patient at the time is most misleading to the uninitiated and offers excuse for being given the benefit of the doubt as to whether they need constant surveillance. Neglect of this one all important element in their treatment is responsible for the sudden deaths by suicide, after which it is clear to all parties concerned that they have not been altogether mentally responsible for some time.

A glance at the recent newspaper reports of the many suicides in our own city proves the need of more thorough practical knowledge of melancholia and its treatment by medical men. While the details that led up to the suicide are often misleading, yet in

the majority of cases it is easy to recognize melancholia as the basis which with appropriate early treatment the life of the patient could often be saved.

Another important fact often overlooked by physicians is that melancholic patients are common victims of the drug habit. This is often due to a congenital neurotic diathesis which renders them exceedingly vulnerable to their baleful effects. Hence it is common to find that the drug route is the one most often selected by the melancholic to end their existence. In proof of this a study of the numerous suicides that have occurred in Kansas City since June 1st, 1900, will show that the large majority of the patients were suffering from melancholia and committed suicide by the "drug route." Since June 1st, no less than ten persons have ended their lives by suicide, and in addition twelve have attempted suicide. Of the deaths two were by pistol shots, five by opium, one by chloroform, one by carbolic acid, and one by corrosive sublimate.

Those who attempted suicide seven tried the laudanum route, three by morphine, one by carbolic acid, and one jumped in the river. The last was rescued by a fisherman, the other eleven owe their lives to the police surgeon and his assistants by their prompt use of the stomach pump and appropriate remedies.

Treatment of Appendicitis.

According to Medicine, this topic has been so extensively discussed of late that it would seem that little can be said upon the subject. A superficial survey of recent literature shows a wide divergence of opinion. Many surgeons urge immediate operation as soon as a diagnosis is made, regardless of the stage of the disease, the condition of the patient, or the number and severity of the seizures. There has been a revolt from such extreme views, the great mortality from operations in the height of a severe attack leading even the operating surgeons to recede from such a position. The argument is advanced with some force that in every case of appendical inflammation there is a stage of congestion, with cloudy swelling preceding pus formation, strangulation, and involvement of the peritoneum. The length of this stage varies in different cases, but it is safe to say that if every case could be seen within the first twenty-four hours, an operation could be performed that would be almost devoid of mortality. Granting this, do we concede the advisability of operation in every case as soon as a diagnosis is made? By no

means. There are many cases in which the early diagnosis is impossible. Some cases begin very insidiously, and a diagnosis is practically impossible in the early stages. Many patients do not come under observation until long after the early period is past; finally, a large percentage will not consent to early operation. It thus happens that most cases have passed the favorable period in which operation can be done safely.

After a patient has passed the early stage, what shall guide us in determining the necessity of operation? Naturally the severity of the symptoms. One writer after another has urged the importance of various symptoms—some are guided by the pulse, others by temperature, and still others by pain and vomiting. These should all have due weight. As was long ago pointed out, a relatively rapid pulse of a thready character is a more important danger-signal than a high temperature. This rule is subject to some variation; in nervous patients the pulse may easily be accelerated beyond the temperature. In such a case the symptom would have nothing like the value that it has in other cases. If the practice of medicine could always be reduced to such simple rules, it would require but little judgment and less learning.

Pain is, next to pulse and temperature, one of the most important symptoms in appendicitis. If it is severe, we have commonly to deal with a grave case; but in judging this symptom discretion must be exercised. Some patients react to slight irritation to which others pay little attention. The individual equation must be carefully considered. Tenderness is also to be considered an element in the pain; if it is excessive, this also points to grave inflammation.

Vomiting is a symptom of great significance. Most patients have more or less nausea, and occasional vomiting is not infrequent early in mild attacks of appendicitis. Repeated intractable vomiting must be regarded as a dangerous symptom, usually marking a case of rapid and severe inflammation.

Tympanites and diffuse abdominal tenderness indicates an extension of the inflammation to the general peritoneal cavity, with all that such a condition implies. Abdominal infiltrations in the region of the appendix should be carefully examined every few hours and their progress noted.

The relation of those symptoms to the necessity for operation should be correctly appreciated. As we have already said, if a case is seen before the onset of severe symptoms and while the inflammation is still in the catarrhal stage, there is little

danger from operation; but if this favorable point is past, the operation is attended with a high mortality. Just what the death rate is no one can say, and the published cases are practically valueless for comparison. Most writers agree, however, that it is somewhat higher than the figures usually given, due to the tendency to report favorable cases. The aim of treatment should be to avoid operation in the acute stage. When the symptoms become very severe, with rapid enlargement of the tumor, or extension to the peritoneum, severe vomiting, increasing pain, and a rapid pulse, operation must sometimes be done. Under these circumstances many cases will die, but the necessities of the individual case determine interference. The vast majority of properly treated cases never reach a stage requiring operation during the acute period.

The medical treatment of these cases, so much decried of late, is of great value; not that it will replace surgical measures, but it will frequently carry the patient over a critical period into the favorable one for operation. We are confident, if efficient medical treatment is employed, comparatively few cases will require operation in the acute stage.

Treatment consists of absolute rest in bed and the external application of heat, either in the form of fomentations or hot-water bags. No food whatever should be given—only small pieces of ice, or water in small quantities. These measures should be employed in every case, no matter how mild. Cathartics and enema should be avoided, with the exception of an early large dose of castor oil to clear out the bowel, after which nothing should be given. Such treatment has for its object the putting of the parts at rest. This not only favors resolution of the inflammation, but if it goes on to suppuration it is the best means of localizing the infection, and preventing general involvement of the peritoneum.

The question of opium in appendicitis has been extensively discussed and its use generally condemned. It is said to "cover up" the symptoms, giving a false sense of security. It does relieve one symptom—namely, the pain—and if the physician is guided solely by the subjective sensations of the patient, it would undoubtedly give a false sense of security. If, however, he is guided by a careful physical examination of the patient, no such apprehension should be entertained. This drug rarely relieves the vomiting; it has little or no effect upon the pulse (excepting perhaps in nervous people), so that the significance of rapid and thready pulse is not obscured. Opium

does not cover a rapidly developing tumor or tympanities. The watchful physician has nothing to fear from opium, and it will be of great service in the treatment. Not only does it relieve pain, but of still greater value is the quietness, not only of the patient, but of the intestinal tract. The latter favors walling off of the process, which is so essential if the infection extends to the peritoneum.

The correct treatment of acute appendicitis is absolute rest, no food, hot applications, and opium. In our judgment, if these rules are strictly followed, but few cases will come to operation in the acute stage.

The treatment of chronic appendicitis is operation. Those who have had a second attack, no matter how mild, should have operation urged. Those who have had a single very severe attack should be operated. It is to be remembered that the mortality is practically *nil* in the interval operation. A consideration that should urge operation is the ill health that frequently succeeds an appendicitis; and further, operation prevents recurrence.

The Significance of Degeneration of Red Blood Corpuscles.

Important additions have been made in the past decade to our knowledge, especially of the morphology of the blood, but we are without an explanation for many of the phenomena observed, says the Medical Record.

It is, besides, difficult to state whether some of the peculiarities are the result of regenerative or degenerative processes, and a ready means by which a correct decision could be reached would be a useful addition to our clinical resources. Valuable therapeutic suggestions might, further, be obtained from a knowledge whether the essential disturbances occur in the plasma, in the red cells, or in the white cells—apart from the prophylactic significance a more thorough etiological knowledge would possess. In a recent communication Grawitz (*Berliner klinische Wochenschrift* 1900, No. 9) discusses at length the pathological significance of certain basophilous granulations that he has found under certain circumstances in red blood corpuscles, even in the absence of other signs of anæmia in the blood, and that he considers with certainty as indicative of a degenerative process. When present, these can be demonstrated in dry preparations by staining with methylene blue after fixation with alcohol. Granular red blood corpuscles have been noticed in cases of pernicious anæmia by several observers, who have considered

them as the remains of dissolved nuclei. Grawitz, however, has found such corpuscles in the total absence of nucleated red corpuscles, and also red corpuscles with intact nuclei but containing likewise many granulations. Unlike the nuclei themselves, the granular matter, further, cannot be stained with methylene green. Granular red corpuscles are not found in the bone marrow in any greater number than in the general circulation, as they would be if they were indicative of karyolysis. In aggravated cases of pernicious anæmia erythroblasts with fibrillated nuclei and constricted portions of the nuclei may rarely be found, but the appearances of these are unlike those of the granular degeneration under consideration.

The granular red cells are particularly numerous in cases of pernicious anæmia. They are found frequently also in cases of carcinoma, and especially when the new growth is so situated as to favor absorption of toxic products, as in the digestive tract. They have likewise been observed in cases of advanced leukæmia and in association with septic processes. The granules are remarkably numerous in the blood in cases of lead-poisoning. This is all the more noteworthy because, in spite of the pallor present, morphological alterations in the blood are usually absent in cases of this kind. The absence of these peculiar granules is considered not less significant than their presence, tending to exclude the action of a blood poison. The granules have not been found in cases of chlorosis, and this evidence seems to confirm the view that the disease is not of toxic origin, but due perhaps to vaso-motor disturbances. The granules are not found in cases of pulmonary tuberculosis free from excavation and hectic fever, nor in cases of syphilis, chronic parenchymatous and interstitial nephritis, and cirrhosis of the liver. These granules are looked upon as evidence of a degenerative process due to the action of blood poisons. It is possible to cause their appearance in mice by exposure to a temperature of between 98.6 and 104 degs. F., and the presence of iron granules in greater amount in the liver is accepted as an indication of increased destruction of hæmoglobin. In this connection it is suggested that some forms of tropical anæmia may have a like mechanism. The granules under consideration cannot be regarded as distinctive of any given disease, but simply as a degenerative manifestation of varied origin. Their importance resides in the fact that they may be present in considerable number before other symptoms of anæmia.

Antitoxin in Tetanus.

According to Pediatrics Behring and Kitasato have established the following points in regard to serotherapy in tetanus: First, the serum of immunized animals neutralizes *in vitro* the poison of tetanus. Second, preventive injections preserve animals against the toxic effects of the poison. They also endeavored to prove that the antitoxin cures animals when symptoms of the disease have already appeared. This they did not succeed in establishing so satisfactorily. It seems now pretty generally admitted that when symptoms of tetanus are due to the inoculation and development of the germs in the tissues, success depends both upon the quantity of serum injected and the time which has elapsed between the moment of infection and that of treatment. It often fails when animals are so injected that they develop a rapid tetanus. In the human subject, in severe cases of acute tetanus, sero-therapy seems almost futile. In mild cases, when recovery takes place, it cannot be positively ascribed to this substance. The preventive treatment has been very successfully employed in France by veterinarians. Veterinary surgeons, who were accustomed to have epidemics of tetanus among animals upon which they operated, have now succeeded in eliminating this disease almost entirely.

Some continental surgeons do not hesitate to use antitoxin as a preventive when tetanus is prevalent among their patients, and hold that its value when so used cannot be questioned. They say that it produces no ill effects whatsoever.

The explanation of the failure of the action of the antitoxin in declared tetanus is held to be due to the affinity of the poison for the cells of the nerve centers. The antitoxin introduced into the blood will neutralize the poison there present, but is powerless to affect that which has already entered into combination with the cells of the spinal cord and brain. If this combination has not progressed too far by diffusion from nerve cells to nerve cells, there seems to be a greater probability of cure if the antitoxin be injected directly into the nerve centers.

Roux and Borrel claimed that in animals a few drops of serum injected into the brain are more certain than large doses injected into the blood or subcutaneously, when symptoms of tetanus have appeared. The antitoxin is powerless to influence the cells of the spinal cord already attacked, but does seem in some cases to prevent extension to the centers in the brain when there injected. There have been a few

cases of grave tetanus in man in which this method has been successful. These cases would almost surely have died without this treatment. To be successful it must be employed early, before many centers have been attacked. It is also likely to succeed at a slightly later period of the disease than the subcutaneous method. Of course the poison in the blood should be neutralized and the infection *atrium* ablated. The subject of the various symptoms and treatments for tetanus, with statistics of experiments on animals and a fairly comprehensive bibliography of the subject, is to be found in an excellent paper by M. Ch. Dopter, in *Gazette des Hopitaux*, April 28, 1900.

Changes in the Joints After Traumatic Lesions of the Cord.

The Railway Surgeon says that Charcot was first to show that disorders of nutrition caused by a lesion of the cord sometimes affect the joints and manifest themselves in the form of lesions of the articulations somewhat similar to those of acute or sub-acute rheumatism. Many observations have been since published and M. Delprat has made a synopsis of the cases, which is referred to in a late French medical journal.

Any trauma of the spinal axis, it seems, is capable of causing these joint lesions—gun-shot wounds, contusions of the cord with or without fracture, etc.

As regards locality the knee is most often affected. One or both sides may be involved or several joints may be attacked at once, knee-elbow, knee-hip, etc. The joint is distended with a variable quantity of fluid which may be serous, opalescent or even hemorrhagic. Pure blood, unlike in traumatic hemarthrosis, is found only in exceptional cases, one of the most curious of which is that of Alessandrini. This author narrates the case of a man with fracture of the fifth and sixth cervical vertebrae with unilateral compression of the cord and hemiplegia, who survived for six months. At the autopsy blood was found in the knee and all other joints of the right side. The total quantity was estimated at eight pounds.

The symptoms are of two classes, local and general. The local limited to the joint, the general those found in other medullary lesions as eschars, erythema or vesicular eruptions. These arthropathies, as in other trophic disturbances, may appear at different intervals after the injury. They have been noticed as soon as forty-eight hours, but as a rule from eight to fifteen days elapse.

Various prodromes precede the location in the joint. In addition to lightning pains, which may radiate through the entire limb, the joint itself is the site of a boring pain, of prickings, of a burning sensation which precede the effusion by some hours.

The effusion is never very abundant in the joint; often only one knee is affected, sometimes both. In rare cases many joints are involved. A peri articular edema sometimes accompanies the swelling of the joint, as in arthropathies following tabes. This effusion after traumas of the cord forms very rapidly. In twenty-four hours the joint is swollen; absorption is slow and the articulation becomes normal in about three weeks' time. It seems remarkable that the appearance and progress of this arthropathy are often parallel with that of the eschar.

The prognosis evidently is not very grave. They last but a short time and end in complete recovery. In this respect they differ from many other special arthropathies of a chronic type. Those from tabes, syringomyelia, spontaneous fracture, etc., which render the limb useless for life.

The Accidents of Summer.

Summer undoubtedly has its pleasure for those whose circumstances permit of their enjoyment, but to others, and even to the pleasure-seekers, there are concomitant dangers which a reading of the papers almost daily forces upon us, says the Boston Medical and Surgical Journal. This last week, for example, has seen an unprecedented mortality from the effects of heat. A certain number of deaths from this cause we look forward to, and are never disappointed, but when we read a statement like the following taken from a contemporary, we are forced to the conclusion that summer has its notable drawbacks: "In New York the list of fatalities was unusually large. On Tuesday, which was the third day in which the thermometer stood at 94 deg. F. at the registration bureau and 98 deg. F. on the street level, cases of aphasia, suicide and insanity, due to high temperature, were reported, and the bodies of 33 children were received at the Morgue ranging in age up to five years. Twenty-two of these came from institutions and 11 from residences. This takes no account of the many deaths that occurred among private families which were not reported at the Morgue."

Boston, in proportion to its size, was almost an equal sufferer, as may be seen by the mortality statistics published in another column. Deaths from this cause are how-

ever to be placed in the category of the unavoidable. No doubt our floating hospitals and similar charities save many lives which otherwise would be sacrificed, but unfortunately our cities grow as rapidly as our charities, with the inevitable result that the number of deaths appears to suffer but slight diminution from year to year. Among the poorest classes this evil must no doubt remain, but among the more well-to-do in the community each year finds a larger and larger number who are able for a shorter or longer time to leave the centres of population for less thickly settled and more breezy localities. But here again a new danger threatens which it is highly desirable not to underestimate. Boards of health at summer resorts are not apt to be vigilant, if in fact they exist at all, and the possibility of danger from defective sanitation becomes in certain cases a manacle to be reckoned with. We have previously found occasion to comment on the neglect of proper sanitary precautions by hotel proprietors and owners whose season is short and whose expenses are heavy. It no doubt frequently happens that the health-giving qualities of salt water and fresh air are vitiated by noxious gases and surface drainage. The crowding of summer resorts becomes therefore a danger different in kind, but even more to be dreaded than the stifling cities, the drainage of which fortunately is unaffected by the number of degrees of heat. It is an anomalous state of affairs and yet a fact that people live calmly and contentedly in the summer under conditions which would not be tolerated for a moment in the winter. That there is relatively so little disease is certainly a source of wonder when we contemplate in a perfectly unprejudiced manner the typical successful, and hence populous, summer hotel.

A certain number each year are drowned. This is the fair penalty for the pleasure of risk. The victims are sometimes careless, and sometimes overmatched by the element with which they are finding amusement. Here again, although these accidents are usually avoidable, they are to be expected, and are to be put down as part payment of the debt we owe for the summer's gayeties. There is however one variety of accident, often most unpleasant in its consequences, with which we have small sympathy. We refer to diving in shallow water. Each summer brings records of one or more such cases. It seems difficult to impress upon a certain type of venturesome swimmers that diving, except for the expert, demands at least several feet of water. Were the depth of the water a difficult matter to ascertain, we should be glad to make allowances, but

inasmuch as the requisite knowledge is so easily gained, we are inclined to pity but not to sympathize with the victim of a fractured vertebra or a spinal hemorrhage who who did not know how deep the water was.

But after all, unless our mood be one of unusual depression, the dangers and accidents which the months of summer bring make no impression on our minds when weighed against the satisfaction of an out-of-door life. Most of us willingly put up with crowds and odors and the risks of sudden death if we can only remove ourselves from the safety and sanitary perfection of a hot and crowded city.

Placental Transmission.

The placenta stands between the fœtal and the maternal organism, selecting from the blood of the latter the materials that are necessary for the growth and development of the embryo, and from the blood of the former those that are no longer useful and require to be eliminated, says the Medical Record. It may, therefore, be looked upon essentially as the respiratory and the nutritive, as well as the circulatory, organ of the fœtus. It is, however, probably, also the medium through which infection is occasionally conveyed to the fœtus from the mother, and through which the physiological effects of drugs administered to the mother are operative. From a review of the literature of the subject, Dorland (American Gynecological and Obstetrical Journal, June, 1900) in a recent communication formulates the conclusion that while many drugs may be administered to the mother without any noticeable effect upon the fœtus, there are certain substances that show a special tendency to traverse the placenta, and, entering the fœto-placental circulation, exert a positive influence for good or evil, according to the conditions that may be present in the given instance. Maternal medication, therefore, is indicated under certain circumstances, either in order to prevent the development of a similar condition in the fœtus, or to counteract the effect of germs and their toxins already introduced into the fœtal economy. The drugs that have been found to affect the fœtus in utero are notably opium, mercury, copper, lead, arsenic, and the iodides. In appropriate doses they may be administered to the mother in the presence of suitable pathological conditions, with beneficial results to both mother and child. Any morbid influence acting upon the mother, either acutely, as in the case of the tuberculous and syphilitic infection, will react

deleteriously upon the product of conception, and either destroy it through its overwhelming toxic action, or render it feeble and less resistant to subsequent and post-natal invasion, or the disease will run an atypical course in utero with or without apparent vestiges at birth. The entrance into the fetal structures is accomplished through the agency of the fœto-placental circulation. It is probable that access is gained through bacterial action, the germs rendering the placental villi less resistant to invasion, whereby both the microbes and their toxins pass the natural barrier at the chorio-decidual junction. As a rule, the infectious diseases do not manifest their characteristic lesions in the fœtus, probably because of the passivity of its organs during antenatal existence. The germs, however, may be detected in large numbers by bacteriological and microscopic examination.

Insomnia.

Continued wakefulness, it has no doubt been truthfully stated, is the crying call to review one's habits and see what is wrong, says the Medical Summary. Every cause capable of increasing the amount of blood ordinarily circulating through the brain has a tendency to cause wakefulness.

There may be mental unrest, irritation or overwork; at any rate, we may depend upon it, there is some want of balance. One chord is played upon too much, others are silent and consequently the mental mechanism is all out of tune. Wisdom, then, dictates a reconstruction of habits.

Everything that tends to throw the blood unduly to the brain, or to accumulate it there, should be avoided. That is a vital matter and prevention is better than cure.

Tight or ill-fitting articles of dress, especially about the neck or waist, and tight boots and shoes should be discarded; the feet should be kept warm so that the circulation may be promoted. Wearing cork soles in the boots or shoes and changing the socks every day are excellent means to this end and strongly recommended.

The loss of a single night's sleep is frequently sufficient to upset the strongest man and unfit him for his next day's duties.

Many persons unable to sleep resort to narcotics, but the habit is not only injurious, but often unnecessary, as there are other remedies which act equally well, and are not harmful. It frequently happens that change of air and scene are all that is needed. Sometimes a stomach and liver compress, in cold or hot water, laid over these parts, act at once and induces sleep, and if the sleep is not continuous it may be

wet again on awakening. Fomenting the upper part of the back on getting to bed with pads at 110 and 120 degs. will encourage sleep. Wet sheet packing is also an unerring soporific agent and anodyne, and will lull to sleep those in the most agitated and nervous condition. Even cold sponging and ablation only, and then at once retiring to bed often induces most tranquilizing sleep.

Taking tea and other hot liquids at supper will often cause wakefulness. These should be avoided. In cases of exhaustion a light, digestible meal frequently has the desired effect. If the habits are sedentary some open air exercise often promotes sleep.

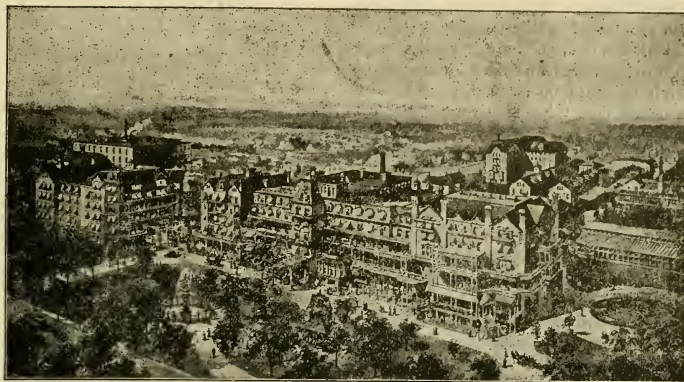
The Physician's Vacation.

"All work and no play makes Jack a dull boy," is an old adage and holds true equally well with the physician as with any other person engaged in daily routine, says the Cleveland Medical Gazette. A physician, dulled for want of vacation and rest, is not capable of giving to his patient the best that is in him. His perceptive qualities are not so acute to observe the more obscure points which aid in the diagnosis of difficult cases. Neither can he be so cheerful and encouraging—two indispensable qualifications—in the presence of his patients when he is feeling thoroughly tired and worn out.

Every physician has perhaps realized or has heard that there is twice during his professional career when it is difficult to take a vacation. First, as a beginner in practice when the financial question may be one barrier and eagerness not to miss a client another barrier. Second, as an established practitioner with a large clientel; as trusted family physician and counselor as to health. Under the first condition it would be pardonable for the physician to abstain from taking a vacation, as he cannot lay claim to exhaustion from overwork. With the second condition, however, we believe the physician should consider it a duty he owes to himself and his clientel to take a vacation every year.

How the vacation shall be spent is a matter to be decided by the inclinations of the different individuals. Get away from home and have a change and complete relaxation from professional duties is the ideal vacation. Some, wishing to improve their opportunities, may seek the larger centers of population, and, by attending the hospitals, add to their professional knowledge.

Insurance companies have a rule for estimating what is termed the "expectation of life." It applies to ages under 60 years and is as follows: Subtract the number rep-



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ments, Swedish gymnastics, and other rational means. Most cases of Bright's disease, diabetes, locomotor ataxia, and many other maladies which are incurable under ordinary conditions, are greatly improved by the combined use of rational remedies and systematic regime, and many are practically cured. Extensive bacteriological, chemical, and microscopical laboratories connected with the institution afford excellent facilities for accuracy in diagnosis and original research.

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representing the individual's present age from eight; multiply the difference by seven-tenths and add the product to the present age. Thus the expectation of life for three men aged 30, 40 and 50 years is 65, 68 and 71 respectively. Now, it is a well recognized fact that the average life of the physician is shorter, by from five to ten years, than that of the business man and those engaged in other professions. This fact alone should be incentive enough for the physician to make it a rule to have an annual outing. What he loses, financially, each year during his absence can, we believe, be made up during the balance of the year by being able to accomplish more work in the same time.

The question as to why physicians do not live to be so old as those engaged in business life and other professions, we do not propose to discuss. We believe the remedy lies, in a great measure, with the individual and that an annual complete relaxation from daily routine and professional worries would have a decidedly beneficial effect.

Care in the Diagnosis of Syphilis.

The Interstate Medical Journal says that it cannot be too strongly impressed upon the profession of the necessity of the most scrupulous carefulness in the diagnosis of syphilis. The making of a slipshod diagnosis is to be strongly condemned in all cases, and it is to be both condemned, deplored and severely criticised when we come to deal with syphilis. The stamping of a condition as syphilis is a matter of the most vital importance to the patient, both as regards his physical and mental status. The horror which most laymen have for syphilis is the result of ignorant teaching and superstition engendered by many years of absurd theories prevalent among both professional and laymen in the "dark ages" of medicine and surgery. Therefore, we say to those inclined to make diagnosis hastily, be careful how you pronounce a man or a woman a syphilitic. Remember the weight which your dictum carries with it. The consequences, especially when a wrong diagnosis is made, are most disastrous to the pa-

tient's well-being. The person who has made the victim of a fatal error in diagnosis of syphilis, as, a rule, really goes through more mental torture as a result of the knowledge that he is supposed to have syphilis than one who really has the disease.

This matter was brought to our notice lately by an experience which one of our esteemed conferees, a competent syphilologist of the city, told us about. An elderly gentleman came under his care who was the very picture of miserable disquietude of mind and body, his condition being due to the fact that his former physician had told him that he had syphilis. He had worked himself into a state of frenzy as a result of this kindly information. On examination by the syphilologist whom he consulted, it was found that he was suffering with a mild case of balanoposthitis and that there existed not a single symptom in the case which would warrant one in diagnosing the condition as one of lues. It was with the most profound joy the old fellow learned that he did not have the disease which he dreaded so much and that with a few days of treatment he would be well.

It is high time that attention should be directed to this hasty method of making diagnoses. The mistakes which are made are often the result of carelessness. Other errors are made in this regard that are not the result of carelessness: they are the result of a deliberate desire on the part of the practitioner to get hold of a good case, a case that means two years' treatment and consequently two years' fees. This class of course are beyond the reach of caution. Mention is made of them in this connection only to remind our brothers of the kind of cattle that are mixed up in this profession of ours. To the other class, the hasty class, we say once more, be careful before you consign a portion to the "embraces of mercury." It means so much to these people that we should always be on our guard to shield them from their own imaginative fears and to protect them with kindly words even if they have the disease in its true form. It is but following in the teaching of Hippocrates to do this, and the medical man who neglects to do it surely deserves, in the crude but expressive words of the ancients, "to be damned."

"Paraldehyd" possesses many of the good without the evil qualities of chloral. Used in Insomnia resulting from various causes. The objectionable taste of the chemical is, to a great extent, disguised in Robinson's Elixir Paraldehyd (see page viii), which is an elegant preparation.

MISCELLANEOUS.

Labor "Down Hill."

Dear Editors:—In your Journal of August, 1900, p. 132, a paper of Dr. Alex. Irvine in the Virginia Medical Semi-Monthly for July, entitled, Labor "Down Hill," has been reviewed. The author of the paper states that he has seen no mention in medical literature of the kneeling position, or labor "down hill."

This position has been mentioned in medical literature, and, as far as I know, at least by Karl Schröder in his "Lehrbuch der Geburtshilfe, 10 edition, p. 216." Reviewing historicals of obstetrics he continues as follows: "Moreover the women of many a people are delivered in a standing position, apparently so uncomfortable, and declared impossible by many writers. The Hindoo women at least are supported by two persons, standing on the right and left, while the Negritas on the Philippine Islands lean only with their abdomen upon a bamboo. The delivery in standing is in use too with the negroes in Central Africa, Boers in South Africa, as well as with Indians in North America.

Very old, undoubtedly, is the delivery in the kneeling or cowering position, as it is known by most of the Asiatic nations, Abesynians and American Indians. In Greece, too, the delivery occurred in kneeling position (occasionally still so at the present time). According to Horner Letho (Latona) at the birth of Apollo leans with her knees upon the earth, clasping with her hands a palm-tree.

The most peculiar is delivery of a woman hanging or suspending. Among some of the savage tribes of South America the women are fastened in a hanging position to a tree, and in some parts of Germany and England it was custom for a woman to be held suspended by a strong man or to be hanging on the neck of another woman.

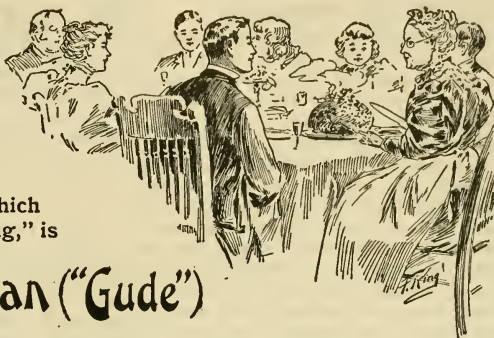
H. v. Ludwig has made objections to the usual delivery in recumbent or side position, objections which are partly noteworthy. The influence of the position upon the tearing of the portions of the introitus vaginae is shown the most markedly in the fact that in the recumbent position the tears of the perineum, in the kneeling or cowering position, however, the tears of the anterior commissura are the most frequent.

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Signs of Death.

It is not often that the well-trained medical practitioner mistakes the signs of death. It is well, however, to note essential characteristics as a certain means of recognition, as has been recently reiterated by the British Medical Journal:

"Syncope, coma, concussion, hysterical spasm, catalepsy and exhaustion may simulate death, although in these conditions the body warmth is retained and the heart and lung action continue, but feebly perhaps. The signs on which a medical man should rely as furnishing the best evidence of the reality of death, prior to the commencement of putrefactive changes, are:

"1. The absence of circulation and respiration.

"2. The gradual cooling of the body, the extremities cooling first and the trunk last.

"3. Gradual supervention of rigor mortis.

"4. The production of post-mortem stains or ecchymoses.

"The careful observation of these four signs by a medical man will enable him to distinguish a living from a dead body."—*Maryland Medical Journal.*

Puerperal eclampsia is treated with diuretic infusions by Dr. Robert Jardine, who bases his recommendation on twenty-two cases so treated, with but five deaths. Other measures were of course, not neglected. For the control of the actual convulsions recourse was had to chloroform, veratrum viride, chloral and bromide. Free action of the skin was secured by means of a hot pack or steam bath. The bowels were opened with magnesium sulphate, given through a tube when necessary. On account of a slow action of diuretics administered per os, injections were made, under the breast generally, of from one to three pints, each containing 1 dr. each of potassium bicarbonate and sodium chloride; or the potassium salt may be replaced by sodium acetate in equal amount. The injection may be repeated if necessary. The author claims a distinct diuretic effect from these injections, and also that the urine passed subsequent to their use showed increase of urea and uric acid.—*Merck's Archives.*

Druggist: "Pills, my dear?"
Little Girl: "Yes, please, sir."
Druggist: "Anti-bilious?"
Little Girl: "No, Uncle is."

"You ride a horseless carriage quite a lot, don't you?" asked the doctor.
"Yes," replied the patient.
"I thought so. You are automobilious."

The Cost of Sickness.

What a large proportion of the time of the well is necessarily devoted to and lost in the care of the sick. Consider the army of physicians, nurses, apothecaries, watchers, pharmacists, etc., etc. If there be a sick member of the family the whole current of domestic affairs is disarranged, and every social and business interest suffers. Every member of the family is alert, on the *qui vive*, and so distracted by anxiety and excitement as to be almost unfitted for the business duties of life. Sleepless nights and anxious days tend to undermine the health of those who are well, and many a fatal attack of disease can be dated from one of these trying experiences. The direct cost of sickness is an item in which the census bureau has never dealt. It cannot be even approximately estimated; while the indirect cost, could it be computed, would be something appalling.—*Diætic and Hygienic Gazette*.

The effect of stagnant water on fish as it mingles with large bodies of pure water, and its comparative harmlessness when drank after being filtered, is one of the strange facts for which we cannot account. One would suppose that a fluid which would be destructive to fish could hardly be drank with impunity even when filtered.

Cutting the Scud on the Upper Nile has released a mass of long standing water which is working its way down the river, killing the fish as it goes.

At Asonan, where the great dam is being built, the dead fish have been cast ashore by millions, poisoning the air with their decomposing odor. The Nile water is all the workmen have to drink, and though when filtered it is not only pleasant to the taste and has no ill effect, yet if eels are plunged into the filtered water they die, apparently from suffocation, in a few moments.—*Medical Times*.

The inhabitants of Chinatown are preparing to enter suit against the federal government or the city of San Francisco for quarantining them during the recent bubonic plague fright. The Chinese are getting bold; after eating our missionaries they want a slice of financial pie as dessert. The action grew out of an attempt of U.S. N. Assistant Surgeon Kenyon to prevent the spread of the plague inland. He had found a well-authenticated case of plague, and had instituted only the most necessary precautions against the distribution of the terror. That his measures were necessary, and that more vigorous proceedings should

have been kept up, has been since shown by the constantly new outcropping cases. It is greatly to be pitied that the medical authorities are constantly hampered by municipal bosses and vote-hunters, and that honest endeavors of honest men in the interest of public welfare are counteracted by the scheming and intriguing of hungry politicians.—*Interstate Medical Journal*.

False Coxalgia; Adherent Prepuce.

Millot (Annales de Chirurgie et d'Orthopedie, April, 1900,) reports a case of a boy aged nine years who was very tall for his age and had seemingly outgrown his strength. His family history was good. He was markedly lame in the right leg, which he dragged on walking. This was always more marked in the evening than during the day. Examination showed that the movements of flexion and abduction were both limited, and there was a distinct enlargement of the inguinal glands in both groins. The child slept well, apparently had little pain except in the right knee, and never woke with a start. Fearing the presence of either septic arthritis or hysterical coxalgia, the child was put to bed for a week, and all the symptoms disappeared. However, two days after he was up and about they reappeared. On further examination it was found that there was a congenital phimosis, with adherent prepuce. These adhesions were broken up, the prepuce retracted, and the glans cleaned of a large amount of smegma. The child's lameness disappeared almost immediately, and he has enjoyed good health ever since.—*Therapeutic Gazette*.

The divine injunction has been fulfilled with a vengeance by a French Canadian residing in Rhode Island. He has been married three times and forty-one children have blessed the nuptial unions, several pairs of twins, and triplets galore being incidents in the replenishing process. With the exception of five, all the children are living, and many of them, as well as some of the grandchildren, have families and troubles of their own.—*Physician and Surgeon*.

Lying on the Left Side.

The difficulty that most persons experience in lying on the left side is attributed by Jacobi to the lack of support of the heart by other organs in this position. Hence the heart becomes more flaccid and requires greater effort to empty itself, the respirations being correspondingly increased.—*Cleveland Medical Gazette*.

Rockbridge, Va., Alum Water.

That are of Intrinsic Value to the Medical Profession.

Extract from a paper read before the Atlanta Society of Medicine, April 26, 1887, by JOHN S. TODD, M. D., Professor Materia Medica and Therapeutics, Atlanta Medical College, Ga.: Ex-President of Georgia Medical Association; not read in our interest, but in the interest of Science and his profession:

"Some four and a half years since I had, among other cases, one of dysentery, which resist ing all medication, became chronic, and a LARGE ULCER OF THE RECTUM DEVELOPED. I called in consultation a noted surgeon. The patient's condition was one of extreme emaciation; blood and mucus in large quantities were voided about an average of once an hour. The dose of opium had been increased to 3 dr. laudanum in twenty-four hours and $\frac{1}{2}$ gr. morphine twice a day, and still matters grew worse. We decided to inject solution 30 grs. to oz. nit. silver in rectum. The result was a COLLAPSE that nearly proved FATAL. Upon it being suggested later that the operation be repeated, the patient, a young man, said if we and his family insisted, to avoid it HE WOULD COMMIT SUICIDE. Dr. W. S. Armstrong was then called in with me. He suggested an exclusively milk diet, gradual reduction of opium, and ROCKBRIDGE (VA.) IRON AND ALUM WATER. Immediate improvement set in, and in TEN DAYS so great was THE CONSTIPATION that oil and enemas had to be resorted to to procure an evacuation from the bowels. Since that time I HAVE TREATED SEVERAL CASES EQUALLY AS BAD, WITH SAME HAPPY RESULT, using same diet and medicines, for of all agents for this disease, I consider THE ROCKBRIDGE ALUM AND IRON WATER THE FIRST. It is equally EFFICACIOUS in CHRONIC DIARRHŒA, AS MY RECORDS ATTEST."

DR. TODD, March 21, 1900, writes: I have for 16 years used these GRAND WATERS constantly in my practice with increased and increasing satisfaction, I inclose you article written 3 years ago on opium. "In chronic diarrhœa and dysentery, the milk diet, ROCKBRIDGE ALUM WATER, and small doses of opium given cautiously—very cautiously lest your patient acquire the opium habit—has proved so INVARIABLY SUCCESSFUL with me, that I have COME TO TREAT THESE CASES with a CONFIDENCE BORN OF SUCCESS."

DR. HUNTER MCGUIRE, Virginia's great surgeon, says: As an astringent and tonic it is one of the most valuable I have ever used.

DR. S. GAILLARD THOMAS, Professor College of Physicians and Surgeons, N. C.: Most efficient astringent and tonic waters I have ever employed.

Write JAMES A. FRAZIER, Mgr. Receiver, Rockbridge Alum Springs, for Pamphlet.

Intestinal Rest in Typhoid.

It is an axiomatic principle in both surgery and medicine that a congested or inflamed part needs rest.

The surgeon recognizes this when he immobilizes the fractured bone and retains the fragments in apposition; the physician likewise appreciates the great importance of this principle in cases of gastric ulcer when he feeds his patient by the rectum in order to avoid irritating the inflamed part, either directly, or by exciting gastric motility. Although typhoid fever is essentially a systemic disease, its characteristic local lesion is the intestinal ulcer, which should, as far as possible, be kept at rest. Milk, which has heretofore been regarded as the only proper exclusive food, is, as a recent writer says, "not a liquid diet, but a deceptive solid"—capable of filling the small intestines with dense indigestible curds which scratch and irritate the ulcerated bowel, and in addition, ferment cause gaseous distention, tympanites, etc. *Liquid peptonoids*, on the other hand, is open to none of these objections. Its administration affords rest to the ulcerated intestinal tract, because:

1st. *It is pre-digested* and therefore promptly absorbed from the stomach, leav-

ing no residue for the bowel to dispose of.

2d. *No curds* are formed as from milk.

3d. *It is absolutely aseptic* and cannot cause fermentation, tympanites or increased peristalsis, resulting in diarrhea.

4th. *It has the requisite nutritive power* to maintain life for weeks and even months, especially in febrile conditions.

Another advantage of *liquid peptonoids* is its *palatability*, which renders it grateful to the patient, especially when given ice cold.

From one to two tablespoonfuls every two or four hours, should be given as necessary. When an efficient intestinal antiseptic is required, as it very frequently is in this disease, *liquid peptonoids with creosote* provides both food and remedy at one and the same time. The unpleasant taste of the creosote is almost entirely abolished in this combination. Each tablespoonful contains two minims of pure beechwood creosote and one minim of guaiacol, its active principle.

The choicest of precious gems, the emblem of purity, the pearl, is now asserted to be only a urinary calculus, the sad ailment of a gravelly oyster!

What Constitutes an Insane Delusion.

In ordinary language, a person is said to be under a delusion who entertains a false belief or opinion which he has been led to form by reason of some deception or fraud. But, the Superior Court of California goes on to say, In *re Scott's Estate*, it is not every false or unfounded opinion which is in legal phraseology a delusion, nor is every delusion an insane delusion. If the belief or opinion has no basis in reason or probability and is without any evidence of its support, but exists without any process of reasoning, or is the spontaneous offspring of a perverted imagination, and is adhered to against all evidence and argument, the delusion may be truly called insane. But if there is any evidence, however slight or inconclusive, which might have a tendency to create the belief, it can not be said to be a delusion. One can not be said to act under an insane delusion if his condition of mind results from a belief or inference, however irrational or unfounded, drawn from facts which are shown to exist. A suspicion which rests upon evidence can not be held to be a delusion. A suspicion which has no evidence to support it is only an unsettled condition of the mind indicating doubt or mistrust, and does not constitute a delusion unless it shall develop into a fixed conviction of the existence of the fact suspected. In determining whether there was in a given case this fixed belief or conviction, the nature and temperament of the person, the circumstances under which he made the statements alleged to show an insane delusion, the habits of his life and association with others and also his conduct toward the relative or other person concerning whom they were made, and the nature of the intercourse maintained with the latter during the period within which they were made, it would seem, should be considered.—*Journal A. M. A.*

General Inhalation Anæsthesia by Ethyl Chloride.

(*La Revue de Stomatologie*, January, 1900).—P. Gires relates his experience in forty-four dental cases. Anæsthesia is very rapidly produced (after 20 to 65 seconds), and is not always accompanied by absolute relaxation. 10 c.c. sufficed to cause anæsthesia, save in an alcoholic, who needed 15 c.c. Violent excitement occurred in the case of two alcoholics.

The available operative anæsthesia varied from twenty-five seconds to two minutes, and in one case lasted three minutes. The longer the induction, the longer the useful period. Heart weakness, glottic spasm,

and respiratory troubles were not observed. Awakening was rapid and complete. After-headache vomiting did not occur.

The horizontal posture as far as possible was preferred, and a mouth-prop was inserted before the administration. The inhaler used consisted of a face-piece and a receiver, open at the top, stuffed with wadding, and having expiratory and inspiratory valves below. The patient is told to breathe deeply.

If the extractions be few and easy one can operate as soon as muscular spasm appears, otherwise it is well to wait for deep anæsthesia. Cardiac and respiratory troubles are regarded as contra-indications. Alcoholics are not always satisfactory subjects.—*Treatment.*

Fright from Witnessing Another's Peril.

The Appellate Court of Indiana thinks it remarkable that no precedent was cited to it, and that it was itself unable to find any, of an action having been successfully maintained similar to the case before it of the *Cleveland, Cincinnati, Chicago & St. Louis Railway Company vs. Stewart* wherein the latter-named party sought, and recovered a judgment for, damages for "nervous prostration" caused by fright from seeing her daughter in peril attributed to the negligence of the railway company. In other words, it says that it was not cited, by the learned council engaged, to any case, holding that fright occasioned by imminent danger to one person can be made the basis of an action for damages by another. And, in the face of the authorities, it declares that it is not willing to establish such a precedent by an affirmation of the judgment to that effect in this case. Witnessing an injury or a threatened injury to another, even though it causes fright, the court goes on to say, is not in itself an injury to the person witnessing it. There must be some direct physical connection between the cause and effect. Hence, the fact that one is frightened by observing another in danger, and that such fright brings on nervous prostration, gives no cause for action to the former. Nervous prostration, it also considers, is largely a mental, and not a physical, condition.—*Four. A. M. A.*

Dr. Bennett, of Chicago, gives 15 grains of chloral hydrate in solution in those cases of labor where there is a severe irritating pain without progress of the labor, or with rigid uteri. This dose often corrects the whole train of symptoms.—*Medical Summary.*

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The word Listerine assures to the Medical Profession a non-poisonous antiseptic of well proven efficacy; uniform and definite in preparation, and having a wide field of usefulness.

On account of its absolute safety, Listerine is well adapted to internal use and to the treatment of Catarrhal Conditions of the mucous surfaces.

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We beg to announce that, in addition to the 14 oz. bottle, in which Listerine is offered to the trade, the pharmacist can now supply a smaller package, containing 3 fluid ounces, which is put up for the convenience of practitioners who prefer, upon certain occasions, to prescribe articles of established merit in the Original Package, under the seal and guarantee of the manufacturer.

FOR DISEASES OF THE URIC ACID DIATHESIS:

Lambert's Lithiated Hydrangea

RENAL ALTERATIVE--ANTILITHIC.

The ascertained value of Hydrangea in Calculous Complaints and Abnormal Conditions of the Kidneys, through the earlier reports of Drs. Atlee, Horsley, Monkur, Butler and others, and the well-known utility of Lithia in diseases of the uric acid diathesis, at once justified the therapeutic claims of LAMBERT'S LITHIATED HYDRANGEA when first announced to the medical profession, whilst subsequent use and close clinical observation has caused it to be regarded by physicians generally as a very valuable Kidney Alterative and Antilithic agent in the treatment of

Urinary Calculus, Gout, Rheumatism, Cystitis, Diabetes, Hematuria, Bright's Disease, Albuminuria, and Vesical Irritations Generally.

Realizing that in many of the diseases in which LAMBERT'S LITHIATED HYDRANGEA has been found to possess great therapeutic value, it is of the highest importance that suitable diet be employed, we have had prepared for the convenience of physicians,

DIETETIC NOTES.

suggesting the articles of food to be allowed or prohibited in several of these diseases. A book of these Dietetic Notes, each note perforated and convenient for the physician to detach and distribute to patients, supplied upon request, together with literature fully descriptive of LAMBERT'S LITHIATED HYDRANGEA.

LAMBERT PHARMACAL CO., ST. LOUIS.

Regulation of City Scavenger Work.

The Court of Appeals of Colorado holds, in *City of Ouray vs. Corson*, that by virtue of a statute conferring on municipal corporations the power to enact such ordinances as may be deemed necessary for the safety, health, comfort and convenience of the public, and the power to make all regulations which may be necessary or expedient for the promotion of health or the suppression of disease, a city has ample power to create the office of city scavenger, and prescribe the terms on which other persons may do scavenger work. Nor does it consider that it is a valid objection to an ordinance doing this that it does not embrace any specific relations concerning the manner in which the work shall be done. Whatever may be needful in this regard, it holds, may be supplied by other and succeeding ordinances, as well as that there may be so made, any modifications needed to meet the requirements of changed conditions.—*Four. A. M. A.*

Amenorrhœa, Dysmenorrhœa and Kindred Disorders Treated with Ergo-Apiol—(Smith.)

In the treatment of Amenorrhœa, Dysmenorrhœa, and kindred disorders, a practical experience of a number of years has convinced me that Ergo-Apiol (Smith) leads all other emmenagogues in points of efficiency, certainty in action, and rapidity of results.

Other remedies I have used I have found at least to be very uncertain in their action, and a few successive failures not only cause the physician to lose faith in the value of the preparation, but also cause the patient to lose confidence in the physician. In the use of Ergo-Apiol (Smith) I have yet to meet my first failure. The following cases will give an idea of its merits.

CASE I.—M. G., age 19; had never menstruated, very anæmic, suffered irregularly from severe pains in the abdomen; local examination gave negative results. I prescribed one capsule of Ergo-Apiol (Smith) every four hours, and three days later menstruation began, and has been regular ever since.

CASE II.—L. D., female, age 19; primipara; had not menstruated since confinement, a period of ten months; had tried various emmenagogues without results; consulted me April 27 last; was given Ergo-Apiol (Smith) in doses of one capsule three times a day. Menstruation began on the 30th; was absolutely painless and normal in every respect.

CASE III.—M. J., age 22, unmarried; had suffered from dysmenorrhœa for several years; had been treated by specialists, but received no benefit. Examination disclosed no displacement, stenosis, or structural cause. Patient was given Ergo-Apiol (Smith), four capsules daily, and has since had no return of the pain, and menstruates regularly.—*W. A. Weightman, New York City.*

The Lane that Had No Turning.

Since adventuring into Egypt in quest of the raw material of which fiction is made, Mr. Gilbert Parker's Canadian fields have been lying fallow. He returns to them, however, with new vigor, and even fuller power; and the serial which he has just completed finds him at the highest dramatic level to which he has yet attained.

The Lane that Had No Turning is remarkable for its honest strength, thorough originality, and absorbing interest. The scene of the story is Pontiac (whither Valmond came), and the period the middle fifties. The leading characters are Madelinette, a famous singer, and her husband, Seigneur of Pontiac, for whom she dares all and risks all. The story gains interest as it progresses and concludes with a striking and wholly unexpected finale.

The Lane that Had No turning will begin in the Saturday Evening Post for September 29, and run through five numbers.

A school of tropical diseases, similar to those already in existence in London and Liverpool, is about to be opened at Hamburg, in Germany. Dr. Nocht, the port medical officer of Hamburg, has been visiting the English schools for the purpose of studying the work in each establishment, since the Hamburg school will work in co-operation with the two English schools. Dr. Nocht has had an interview with Mr. Chamberlain, the English Colonial Secretary, who is intensely interested in the subject. In fact, it was mainly due to the indefatigable efforts of the Colonial Secretary, in conjunction with some West African traders in Liverpool, that the schools were founded in England. It is contended that once the malaria is suppressed in West Africa the country will become a second India.—*Scientific American.*

Shock.—"Skinner got a bill the other day for his wife's automobile drives, and he's been laid up ever since." "What's the matter?" "The doctor says he's suffering from an overcharge of electricity."—*Life.*

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—GEO. H. SMITH, M. D., Brooklyn, N. Y."

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RESINOL has given me entire satisfaction. Its wide range of usefulness especially recommends it.—

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Am prescribing UNGUENTUM RESINOL with great satisfaction.—J. S. BEAUDRY, M. D., Chicago, Ill.

Have used RESINOL in many cases and am exceedingly pleased with its action.—G. E. WILDER, M. D., Sandusky, Ohio.

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I am more than pleased with UNGUENTUM RESINOL.—C. B. WALRAD, M. D., Johnstown N. Y.

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Highly recommended
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New Books on Press.

The Treatment of Fractures, by W. L. Estes, A. M., M. D., Director and Physician and Surgeon-in-chief St. Luke's Hospital, South Bethlehem, Penn.

This book describes the treatment of fractures in a practical and interesting manner and is replete with original drawings, photographs and skiagraphs. Printed upon heavy book paper and substantially bound in cloth, containing about 250 pages. Price \$2.00.

Also, The Technique of Surgical Gynecology, by Austin H. Goelet, M. D., Professor of Gynecology in New York School of Clinical Medicine; Consulting Professor of Gynecological Electro-Therapeutics, International Corresponding School, Scranton, Pa., etc.

This book presents to the readers the technique of gynecological operations in a manner combining simplicity with completeness. The various subjects are individually discussed and graphically illustrated with a large number of drawings and sketches especially prepared. About 300 pages, same price as above.

The two works are thoroughly practical and all details are carefully elaborated. Every general practitioner should possess a copy of each. Ready for delivery about September 25th. Published by the International Journal of Surgery Co., Medical Publisher, 100 William St., N. Y.

Derangement of the functions of the glandular system disturbs metabolism, and health is impossible until the missing secretion is supplied to the economy. In some instances, supplying the element is necessary for a time only; in others, it must be persisted in.

The wonderful results produced by the Suprarenal Capsules in hay fever and asthma; by the Thyroids in goitre, myxodema, cretinism, fibroid tumors, and various skin diseases: by the Bone Marrow treatment in anemia, chlorosis, rickets, and malaria; and the Ovarian and Parotid Extracts in ovarian troubles have suggested to practitioners the idea that many intractable diseases of obscure origin may be benefited by the organo-therapeutic agents.

Physicians desiring to experiment may obtain from Armour & Company, samples of their preparations.

Messrs. Armour & Company showed at the Paris Exposition their Pepsin, Pancreatin, Thyroids, Suprarenal Capsules, Extract of Soluble Beef, and were awarded a gold medal.

Possibilities of English.

A number of commercial travelers were telling stories in an uptown restaurant last night, and this was vouched for by one who used to be a railroad conductor in eastern Pennsylvania:

"My train had always reached Lebanon just after an express train, but the schedule was changed so as to bring my train into the station first. A voluble Pennsylvania Dutch woman was a regular passenger on market days, as my train stopped at her station, while the express whizzed by. The first evening that I ran my train in ahead of the express she was much astonished and delighted. She rushed up to me and exclaimed, in the high key and peculiar dialect of that region:

"'Vy, you're early of late; you're first at last; you used to be behind before.'"—*New York Tribune*.

"VIN MARIANI" is essentially the brain and nerve tonic of those who have talent and genius. These it is who compose the great army of intellectual workers, and the ravages made upon their nervous systems by the demands made upon them are at times truly appalling. This damage and consequent drain yield to nothing more quickly than to "Vin Mariani." The most noted European physicians, literateurs, musicians, singers, artists and diplomats have sent the most flattering letters to M. Mariani extolling his product. Not only these but crowned heads as well have been mentally invigorated and rejuvenated by "Vin Mariani" and never tire of speaking words in its praise. It must be acknowledged that unsolicited testimonials, couched in such glowing terms, from such sources, are the best evidence possible that can be offered for the merits of the preparation. When "Vin Mariani" becomes as well known in this country as it is in Europe, it will be adopted as one of the indispensable remedies in the household.—*The St. Louis Medical and Surgical Journal*, May, 1899.

Remove a sarcoma at once if it is in an accessible spot. Never delay removal. Cut well clear of it. The rapidly growing soft sarcomata will almost inevitably return, and the very malignant variety, if uninterfered with, may terminate life in 6 months; but operation postpones the evil day, and renders it possible that death will occur from metastasis in an organ, and that the patient will escape the horrors of ulceration and hemorrhage from the original tumor. Slowly growing and hard tumors offer some prospects of cure.—*Da Costa*.

ODOZONE—MERRELL.



ODOZEN—an iodine derivative of methyl salicylate (true oil of wintergreen) It has an agreeable odor, is non-irritant, and combines the antiseptic, discutient, alterative and absorbent qualities of iodoform without any of its characteristic disadvantages.

The iodine being liberated very slowly in the presence of heat and moisture, no toxic effects may be apprehended.

The density of Iodozen is less than that of iodoform, hence a given quantity will cover a larger surface; it is, therefore, more economical.

Iodozen is absorbed slowly and adheres to sores and mucous membranes for a considerable period, and in the meantime exerts a protective as well as antiseptic effect.

These qualities place Iodozen in the front rank of antiseptic applications in the treatment of aural, venereal, and cutaneous diseases, in minor surgery and catarrhal affections of the uterus and nasal mucous membranes.

Iodozen, when mixed with powdered boracic acid in the proportion of 5 to 10 per cent. and used by insufflation, is of value in post-nasal catarrh and ulcerated conditions of the throat, but in specific lesions it is advisable to apply Iodozen pure, in order to produce the necessary antiseptic impression.

A useful dusting powder for the chafing of infants is made by combining Iodozen 5 per cent. with powdered starch—in erysipelas, Iodozen may be advantageously applied to the inflamed surface undiluted.

Combined with vaseline or lanoline, Iodozen forms an ointment of general utility as a healing application, and for the relief of puritis ani and vulva, hemorrhoids, prostatic irritation and gonorrhœa, in which affection it may be used as an injection.

Additional therapeutic applications :

Acne Rosacea	Eczema of auditory canal	Prurigo
Atrophic Rhinitis	Excoriations	Suppurating lupus
Adenitis chronic	Enlarged Spleen	Suppurating buboes
Arthritis	Goitre	Scrofuloderma
Abrasions	Hemorrhoids	Sycosis
Abscesses	Impetigo	Sun-burn
Burns	Irritation of the skin	Septal ulceration,
Balanitis	Ozœna	syphilitic or traumatic
Catarrh	Otorrhœa	Tinea tonsurans
Carbuncle	Post-operative wounds	Ulcerated surfaces
Chancre	of nasal cavities	Urticaria
Chancroid	Pemphigus	Varicose ulcers
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ODOZEN is put up in one ounce vials,

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When Does the Doctor Sleep?

People forget that the doctor needs rest and sleep as well as his patron. In many cases a person taken sick will suffer all day and the doctor will be called late in the evening, perhaps just after he has retired after a long day's labor. He might just as well have been called in the afternoon or early evening.

The following little anecdote has two morals, and the readers of *The Healthy Home* are bright enough to appreciate both of them:

A Boston physician was called out of a sound slumber the other night to answer the telephone. "Hello! what is it?" he asked, little pleased at the idea of leaving his comfortable bed. "Baby is crying, doctor, what shall I do?" came across the wire, "Oh, perhaps it's a pin," suggested the doctor, recognizing the voice of a young mother, one of his patients. "No, was the reply, "I'm sure it can't be that." "Perhaps he has the colic," returned the doctor, with well simulated solicitude. "No, I don't think so," replied the mother, "he doesn't act that way." "Then perhaps he's hungry," as a last resort. "Oh, I'll see," came across the wire; and then all was still. The doctor went back to bed and was soon asleep again. About half an hour afterward he was awakened by the violent ringing of the telephone bell. Jumping out of bed and placing the receiver to his ear, he was cheered by the following message: "You are right, doctor, baby was hungry."—*Healthy Home*.

"Neurasthenia and General Disease."

Since the first accurate description of neurasthenia by Dr. Beard this disease has been made the subject of numerous careful clinical studies, especially in America where it seems most prevalent.

It has been found that this condition may be due to a variety of causes and it becomes necessary therefore to determine the exact etiological factor in every case in order to adopt a successful line of treatment. In a very important group of cases in women the chief exciting cause is disease of the generative organs, the neurasthenic symptoms being dependent upon reflex disturbance of the central nervous system due to the local irritation. The treatment of this class of patients must, of course, be particularly directed toward the removal of the local trouble, in connection with the employment of such hygienic regulations and internal remedies as will improve the state of the nervous system.

Among the topical measures for the removal of irritation, congestion, and inflammation of the genital organs, Micajah's Medicated Uterine Wafers are especially adapted for this class of cases. These patients are apt to be made worse by severe operative procedures. On the other hand, as the wafers are easily applied, un-irritating and cleanly, patients do not object to them, and their use is promptly followed by relief of the local symptoms and, in many instances by a permanent cure, without the necessity of surgical intervention.

The "Three D's" Crusade.

At the meeting of the Oxford branch of the National Association for the Prevention of Consumption, Prof. Clifford Allbutt sketched clearly the main facts as to the nature of the disease and indicated the principles on which preventive measures must be based (*Brit. Med. Jour.*, June 23). He epitomized the precautions as an active crusade against the three D's—damp, darkness and dirt—a crusade which, as he said, every individual could carry out in his own home. In getting rid of these evils, they would at the same time be getting rid of many other pests besides tuberculosis, and would be raising the standard of the general health. There is wisdom in inculcating the general principles of hygiene in public meetings, for general hygiene appeals most strongly to the public mind when its application to a special evil is forcibly impressed.—*Jour. A. M. A.*

The 12th annual meeting of the Tri-State Medical Society of Alabama, Georgia and Tennessee will be held in Chattanooga, Thursday, Friday and Saturday, October 11, 12 and 13, 1900. A rate of one fare for the round trip may be obtained by asking for tickets to the re-union of the Army of the Cumberland and the Spanish-American War Veterans, which are good for the whole week. Those desiring to read papers should send titles to the Secretary, Dr. Frank Trester Smith, Chattanooga, Tenn.

The meeting of the Southern Surgical and Gynecological Association will be held in Atlanta, November the 13th, 14th, and 15th, under the Presidency of Dr. A. M. Cartledge, of Louisville. Prospects are splendid for a successful session. Members of the medical profession are cordially invited to attend.

Very sincerely yours,
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Is Pneumonia Contagious?

Dr. J. T. McAnally, Carbondale, considered this question and the following conclusions and inferences were drawn: 1. Pneumonia is an acute specific and mildly contagious disease produced by the micrococcus lanceolatus, involving the vesicular structure of the lungs in an exudate of greater or less extent, and is attended by the severe and often dangerous constitutional symptoms due to the toxins produced by the infecting micro-organism. 2. Isolation should always be recommended, and no two patients should occupy the same room at the same time. The aged and children, owing to the great mortality among them and to the enfeebled powers of resistance of the former, should be excluded from the sick-room. 3. The room should be large, and should be kept well ventilated, as pure air is very essential for a pneumonia patient. The danger of vitiated air should be constantly borne in mind, for it is a point to be doubly guarded because of its dangers to the attendants. 4. The prompt and thorough disposal of all pneumonic sputa is important, for while it may be harmless to-day, it may be dangerous to-morrow. Prophylaxis is clearly one of the most important points to be considered. Since the true nature of pneumonia has been demonstrated by the bacteriologist, we may the more readily appreciate its dangers and guard against the septic possibilities resulting from pneumococci invasions. 5. The rapid increase in our knowledge of bacteriology and the introduction of specific remedies afford ground for the hope that soon we may discover a treatment for this disease as certain and effective as that of antitoxin for diphtheria, or quinin for malaria.—*Journal A. M. A.*

Health-Culture for September is an exceptionally valuable issue of this practical hygienic journal, opening with a paper on "Curing by Suggestion" by W. R. C. Latson, M. D. The writer gives some very important suggestions as how to apply suggestion in such a way as to afford relief. Dr. James H. Jackson discusses the importance of "Conservation of Vital energy" "Indirect Suicide" is the topic discussed by Dr. Felix L. Oswald who writes of this in his usual style. James Leonard Corning, Sr. discusses "Fast Livers," of whom he finds there are a great many. Dr. Latson begins a series of papers on "Physical Training as the Basis of Health, Strength and Grace." "Points on Health" by Dr. Page considers bathing, sleep and backache. An article which will attract the

attention of ladies is the "Care and Preservation of the Skin" by Etta Morse Hudders; this shows the importance of the skin, what should be done and how to do it, and especially as to the care of the face, the preservation of the complexion and the prevention of wrinkles and age. The paper is very fully illustrated and full of practical suggestions. Dr. Dudds gives a "Rational Treatment for Malarial Fever without Drugs." "Food for Children" is considered by Dr. Reeder. A very instructive part of this number is a "Comparative Table of Food Products and Values," compiled by Prof. Albert Andrews. In this table is given the constituent elements and more than 100 food products showing the amount of flesh and bone material, heat energy and time required for digestion and the average cost, from this the thoughtful reader can determine what foods are best for his individual case and what will prove most economical. A very strong editorial considers "the Rights of the Child" and can certainly be commended to every thoughtful parent. This with "Answer to Correspondents," "Notices of New Books," in line with the object of the magazine, certainly presents good value for the price of Health-Culture. It is issued monthly at \$1.00 a year or 10 cents a number. Address, Health-Culture, 503 Fifth Ave., New York.

Food Theory of Medicine.

Walter Emery Merrill, M. D., U. S. Marine Hospital Service, says: "Among the advanced members of our profession, I believe the drug tissue-feeding theory no longer obtains. And rightly so, for it has not been proved that medicine is ever, *in itself*, a food. The large number of malarial cases emanating from the topics are cured in the Marine Hospital service, not by tissue-feeding, but by ridding the system of the intruder and directing the vital forces along the lines of repair. This I find to be best done by the frequent and judicious administration of laxative antikamnia and quinine tablets."

Normal heart sounds are sounds of tension; murmurs are sounds of vibration. The normal sounds of the heart have been recognized by syllables "ubb," "dupp," "od," and abnormal sounds of endocardial origin by "up," "ur," "us," "ush," or by full vowel sound as "oo," "u" "ah" and "aw", by musical tones or by interrupted tones, or hearing general sounds as "urr" or "orr".—*Musser*.



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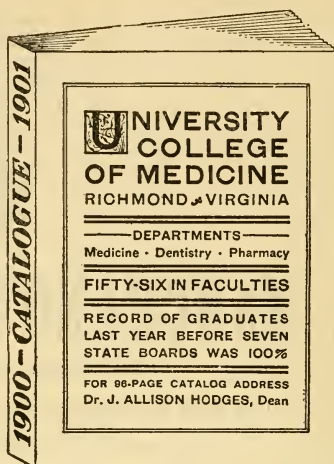
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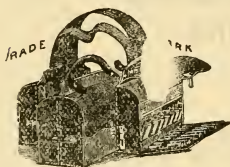
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Treatment of Cancerous Cachexia.

Lawrence (The Medical Brief, April, 1900) gives as the best treatment for cancer and the cachexia attending it, teaspoonful doses of Ecthol four times daily in conjunction with alterative doses of iodide of arsenic. The latter should be administered in doses ranging from one-sixtieth to one-thirtieth of a grain three times a day and continued for a long period. Ecthol contains the active principle of thuja which is accorded specific value in cancer. The treatment outlined is aimed to cause absorption of the cancerous tissues.—*Medical News.*

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Laborde's Treatment of Asphyxia.

M. Laborde reports some new cases proving the value of his method of treating asphyxia by rhythmical traction of the tongue. In an experiment conduction on a dog asphyxiated by chloroform, life returned after two and three-fourths hours of traction. In a man that had been beneath the surface of water for 10 minutes, life reappeared after three hours of continual tongue traction. From 18 to 20 tractions per minute must be exerted. The author considers this the most powerful and successful measure at our disposal.—*Medical Standard*.

Cremation.

The Burial Authorities Cremation Bill was read a second time in the House of Lords towards the end of last month, giving burial authorities power to provide and maintain suitable places, and the necessary appliances for cremating dead bodies. We are glad to see that this Bill has passed, inasmuch as we have always held that cremation is the most fit and proper method for the disposal of our dead, more especially from a sanitary point of view.—*Therapist*.

Local Notoriety.

It is amusing to note the various methods adopted whereby the ethical physician secures advertisement in the lay press. In a recent conversation with a leading newspaper man regarding why they always mentioned the physician in attendance on any special case, was much surprised to learn that when they mentioned any case of importance without naming the physician in attendance, they invariably had their attention called to the fact by the physician, who expressed great dissatisfaction. A search through the files of the daily press will convince the most skeptical that this disgusting method of advertising has become exceedingly prevalent. In the event of the patient's death the physician's name is rarely mentioned. If it is done in the one case why not in all. All such puffing in which the name of the physician is mentioned in connection with the treatment of a case or the performance of an operation should be absolutely inerrdicted. The ethical physician should seek a criterion of greater professional eminence and distinction than mere local notoriety.—*Kansas City Medical Index-Lancet*.

The Charlotte Medical Journal.

VOL. XVII.

CHARLOTTE, N. C., OCTOBER, 1900.

No. 4.

Suggestions for the Care of the Nose.*

By E. R. Russell, M.D., Charlotte, N. C.

To accomplish this the physician must explain why and at same time show how the general health is greatly influenced by nasal disease. In considering the causation measures necessary to avoid them are among other precautions. One may protect himself against many of the deleterious influences that are found in daily work. That the nose remains in a normal course of its function there must be an undisturbed blood circulation. Tight clothing such as corsets, high collars and tight shoes produce a vascular stagnation. At same time constipation must be overcome to prevent catarrhal troubles of the nose.

Sweating feet being one of the most frequent causes, should be corrected by 20 per cent. solution of formaldehyde, painted on soles of the feet, for a few times, and order thick soled shoes and thin stockings. All clothing should be of such a character as not to interfere with evaporation and retain secretions. During respiration the bulk of the air passes along the septum above the inferior turbinated body, making a semi-circle in its course, extending to the roof of the nose.

Abnormal dryness of the mucous membrane or nasal obstruction, interfering with the free access of air to the olfactory portion of the nose causes a loss of the sense of smell and gives rise to a peculiar nasal intonation. But to warm, moisten and free from dust the inspired air is a most important function.

Impaired ventilation and drainage of the nasal chambers by growth and deformities are the cause of repeated attacks of acute coryza and chronic nasal catarrh.

Air in its passage through the nose is prepared and rendered suitable for respiration in the lower respiratory organs, and on this depends the health not only of the respiratory tract, but of the entire organism. Those organs directly or indirectly connected must sooner or later become diseased. This is very true of the throat and lungs.

Many of our best writers hold that most

of the chronic affections of the lungs are due to improper nasal respiration.

It has been shown time and again that such diseases as pulmonary phthisis are greatly benefitted by treatment of nasal affections, not to mention hay fever, asthma, cardiac palpitation, supraorbital headache, etc. An individual with any care for health and cleanliness performs daily "the toilet," seldom does this include the nose, though one of the most uncleanly organs of the body. Cleanliness of this organ should be added to that of teeth, etc.

Not wishing to enter upon the pathology of chronic nasal catarrh, yet in its early stages many of these conditions might be avoided, and the operations that become necessary be diminished in frequency. Cold in the head or coryza should never be neglected. A simple acute inflammation of the nasal mucous membrane establishes by repeated attacks a permanent alteration which results in chronic nasal catarrh. Acute coryza frequently means the invasion of an infectious micro-organism, causing inflammation which extends to the eustachian tubes, ear, larynx, trachea and lungs. These micro-organisms not only penetrate the nasal chambers, but accessory sinuses.

It has been demonstrated that staphylococci and streptococci are found in these accessory sinuses after diphtheria, scarlet fever, measles, etc. In nasal diphtheria, virulent bacilli were found months after apparent cure.

Dr. J. R. Winslow, of Baltimore, says that the more extensive his own experience become, in affections of the accessory cavities of the nose, the more he was convinced that many, if not most of them, were ushered in by an acute coryza, so-called, showing that we should never neglect even a simple cold in the head. These cases require a simple, efficient and harmless treatment, which may be carried out at home. We may use warm a one per cent. salt solution, Dobells, etc., but the spray is irritating and hastens the result—chronic nasal catarrh. The symptoms of these cases are many: occlusion of the nostril, from side to side, most marked at night when lying down. This is likely due to some vaso-motor disturbance and temporary engorgement of the turbinated body which is most dependent. There are those who complain of itching

*Read before the Charlotte Medical Society September, 1900.

inside the nose. Others simply of a general uncomfortable feeling, or a feeling of tension at the bridge of the nose. Various other symptoms caused by a perverted nervous function; these are premonitory symptoms and should not be dismissed as of little importance, but prophylactic measures should be instituted. The mucous membrane at this stage shows only slight congestion.

TREATMENT.—Saltwater in the strength used by the laity is quite irritating and it is dangerous to sniff up the nose, as it may be aspirated into the middle ear with permanent damage. We want a cleansing agent, and cooking soda in a two per cent. solution (3i to about tumbler of warm water) is as good as the best.

For therapeutic effect Dobell's solution is very good. The formula of this is:

R.

Sodii bicarb.	
Sodii biborat., áá,	gr. xxx.
Acid carbolic,	gr. xv.
Glycerine,	3iv.
Aq.	oi. ℥

If the carborlic acid is objectionable, may substitute in its place, two grains each of menthol, thymol and salicylate of soda.

This is a sedative wash due to the carbolic acid, and is sufficiently antiseptic. The alkalies render the mucous more fluid, and the glycerine makes it correspond to the normal secretion of the body.

As to the means of applying these cleansing and antiseptic solutions: The Birmingham Nasal Douche, which is a model after Politzer's and used daily in his clinics in Vienna, is very convenient, easily kept clean and is safe to put in the hands of patients, where as syringes of all kinds or any apparatus where the force of the stream is under the control of the patient should not be recommended for their own use. A larger-size douch cup made by Whitall, Tatum & Co., termed No. 10, may be had for a small sum.

The solution which should always be warmed, may be brought to the required temperature by holding the same over a lamp. Now, with the finger over the air inlet, the stream can be regulated, and the nose-piece is introduced into the nostril with the tube vertical, head thrown slightly backward and chin forward over a basin.

By directing the patient to pout or breathe through the mouth during the procedure the palate is elevated and the fluid flows in a continuous stream in one side and out the other nostril.

Patients are directed to wash with the warm soda solution through each nostril,

then once with a warm antiseptic wash, after which they are directed not to clear the nose and throat, but to wipe the outside.

This treatment should be carried out night and morning, in all cases of cold in the head and especially in influenza, scarlet fever and measles, in addition to well-proven constitutional remedies, as long as symptoms of irritation are present.

Exploratory Incisions; Their Relation to General Practice.

By W. O. Spencer, M. D., Yanceyville, N. C.

The practice of medicine, as well as of its hand-maiden surgery, is a progressive science, and the advent of asepsis with its high degree of perfection of to-day, has caused to pass into oblivion the old practice of "looking wise, knowing all, and keeping the general public in the dark," to conceal the ignorance of the doctor.

The general practitioner of medicine in the closing days of the 19th Century must at least know something of modern medical science to meet the demands of almost any country practice, and to gain the confidence and respect of his fellow-men as a modern, up-to-date doctor.

For he as well as the professors of surgery in our medical colleges, the specialists in our large cities, and those who have their private sanitariums, frequently meets with, and is called upon to treat cases with trouble within the cavities, in which a positive diagnosis cannot be made otherwise than by the senses of sight and touch.

Physical signs, symptomatology, palpation, percussion, the microscope, centrifuge, and all other diagnostic agents at our command, do not always give us a clear insight into the real condition of our patients. The text-books too are oftentimes misleading, or at least they do not exactly fill the description of our particular case. So what are we country doctors to do with all such cases, those that we cannot ascertain clearly the exact condition of, at the same time recognizing that the trouble is within the abdominal or pelvic cavity?

Shall we continue to send or carry all our patients, when we are not perfectly clear as to a differential diagnosis to the specialist? They, in nine cases out of ten, after making an examination, and hearing the clinical history, are no nearer a conclusion than we, but they very promptly say: "We can clear up the mystery by an exploratory incision."

To the very few who are financially and physically able to go to the specialist and have their work done, we haven't a word to say, but for the thousands who cannot go and have only their own doctor to depend upon for every thing, and at all times, I make this plea.

We remember having heard on one occasion a very distinguished laparotomist, one who has justly been called the "wizard of abdominal surgery of this age," say that "no surgeon knew what he would find within a belly cavity until he had gotten inside; that those who thought they knew, knew but little or nothing," and that he himself depended upon the entrance thereof to clearly diagnose the trouble.

Then what are we to do? The specialist enters the abdominal cavity as fearlessly as some would a superficial abscess. Why is such the case? They have the courage, combined with a knowledge of anatomy, physiology and pathology, and above all they know the safeguard of thorough surgical cleanliness.

To the members of our profession of North Carolina, and especially the younger members, I beg leave to offer these few suggestions.

If there are some who do not hesitate to make an exploratory incision, why should we? With the existing laws of our State, requisite to proficiency, the advantages of the curriculum of all such medical colleges as can prepare a student for our State Board, and considering the time required to prepare one for the practice of medicine in our State, it does seem we might acquire a sufficient knowledge of anatomy, physiology and pathology, and above all of the very essence of asepsis to enable us to rely more on ourselves for a diagnosis, and with the aid and counsel of our neighboring brethren we may be enabled to save many a life and relieve the ills of suffering humanity at home.

Let us cultivate and acquire more self-reliance and confidence, so that we may diagnose and treat our own patients instead of sending them to the large cities to have their work done.

There can be no doubt whatever but that we who have only one case at a time are more able to give the patient our personal attention, and if we have a thorough knowledge of those branches of science necessary to do an operation and of asepsis with the other requisites to the practice of medicine, combined with common sense and good judgment, there is no reason why we should not get as good results, and my experience has been oftentimes better, than those who are rushed with so many patients at once.

Let surgical cleanliness (asepsis) be our watch-word, let us catch its full meaning, and practice from our teachers, who do such work successfully; but if we fail to thoroughly understand it in its fullest sense by all means let us desist from such work.

And another important thing is not to defer doing our work too long relying on "time" to help us clear up any mystery. I remember on one occasion while on a visit to a western town several doctors of the town had a patient very ill with some obstruction of the bowels. They very courteously invited me to go with them out to see the patient. After having for several days attempted to open the bowel by such agencies as were at their command, and all having failed, and after having taxed their brains as to the character of the obstruction, they were discussing the advisability of an exploratory incision. One of the gentlemen asked my opinion. I replied: "With the existing conditions I should not hesitate one moment in making an exploratory incision and finding out the condition and cause of the obstruction and removing it, that with thoroughly aseptic hands and instruments, no harm could be done, and he must certainly die without it." The gentlemen, however, decided to defer operating and their patient promptly died.

From the days of Hippocrates until the perfection of Lister's theory, (which is no longer a theory, but is known by all men of sound mind of to-day to be a scientific truth,) our forefathers in medicine thought it to be malpractice to open the abdominal cavity except in desperate extremities, and then nearly all the patients died.

Thanks to Lister and his successors such an erroneous theory is obsolete. Even then it was thought that an operation could not be performed unless the patient were in the amphitheater of a college hospital or the operating room of the specialist. Of course the operating room is much to be desired by any one who opens a peritoneal cavity, but it does not seem necessary that we should let our patients die for the want of an operating room. Provided there be thorough surgical cleanliness in every detail, I have seen as good results from a patient in a cabin as in an operating room.

Trained nurses are becoming more plentiful each year and consequently can be had for less cost than a few years back. In almost any neighborhood a nurse can be procured for a few days at a time, and with an efficient nurse there is no reason why we should not obtain as good results in apparently unfavorable environments as in an operating room, provided the doctor and assistants are aseptic in every detail.

I would not have you conclude from my remarks that every doctor should be a surgeon, but those of us that can, why should not we do our own work and get the commendation of a duty well done, and also the remuneration therefor.

Therefore let me urge you, those of you that love the work, and can procure the instruments and appliances to do surgery when it is necessary, let us "do with our might what our hands find to do."

With your permission I will present for your consideration two or three cases in which exploratory incisions have been made in my practice that have been very satisfactory to myself as well as to the patients.

CASE 1.—Miss W. M., age 17, had never menstruated. Family history negative as to immediate family, but some tuberculous tendency in mother's family. As a child she enjoyed usual good health up to the age of 10 or 12, when she became delicate, subject to recurrent attacks, called by attending physician malarial fever; had recurring spells of fever, was very obstinately constipated; complained of pain in abdomen. Was called to see her in March, 1897. From the intermitting character of the fever and other symptoms I thought it to be malaria at first, and began treating her for same. I soon located a tenderness in right iliac fossæ at McBurney's point with a slight tumor. At that point extreme tympany and enlargement of abdomen, circulation rather rapid, 90 to 95; temperature ranging from 99 to 103, every other day. It occurred to me the possibility of appendicitis, but under symptomatic treatment it passed off. In May I was again summoned to see her. I found her similarly affected; put her on similar treatment with the same result as before. Again in July she had another attack much more severe. Up to this time I had not disclosed my opinion as to previous attacks, but at this time I told the family she had appendicitis, and had had two previous attacks I thought, but I did not care to alarm them until it became necessary in my judgment to take a more serious step, that of surgical procedure. The family refused having this done until late in the fall.

The patient made little or no improvement, in fact, grew worse and finally their consent for an operation was procured. She was admitted to my private house and operated on November 9th. There was a tumor about the size of a cocoanut in the right iliac fossæ. An oblique incision about four inches long was made just at McBurney's point. Expected on entering the abdominal cavity to find a considerable sac of pus, on the contrary, found a perfect mass of

adhesions; the small bowels adhered to ascending colon, colon to posterior wall, appendix bound down. The peritoneum and bowels were studded with numberless tuberculous nodules, the adherent mass forming the tumor, thought to be a pus sac. With much difficulty the adhesions were broken up, appendix ligated and removed. (It was found to be about 2½ inches long and the usual size, with no disease otherwise than the tuberculous condition.) The abdominal cavity was thoroughly flushed out with gallons of warm normal saline solution and thoroughly dusted with iodoform—(between one-half and one ounce used)—cavity drained; incision was closed and usual aseptic dressing applied; uninterrupted recovery.

There had been, prior to operation, local tuberculous manifestations, such as suppuration of the glands of the neck. For several weeks after operation there appeared several spots of lupus, which were curetted and dressed in the usual way. The patient was put on cod liver oil, syr. iodide iron, and Fowler's solution, being somewhat depleted in general health. Later she was given creosote, 3 to 25 m . ter die, which completely overcame the constipation. She is now (3 years after operation) in better health than since she was a child.

CASE 2.—Mrs. J. L., age 36, mother of three children. Health previous to marriage good. During pregnancies manifested all the premonitory symptoms of eclampsia. I treated her in two instances, found albumen in abundance; no microscopic examination. Was attended at confinement by midwife; no eclampsia. Otherwise health about as good as usual until three years ago she began to complain of general periodical pains in abdomen; constipation obstinate, appetite variable, general debility. She was advised by a neighbor to seek medical advice (which she had not had for two years).

She came to my office and upon examination a tumor was found in right iliac fossæ of considerable size and another in Scarper's triangle about the size of an orange. I at once diagnosed the case appendicitis with a pus sac, and the tumor below Poupert's ligament had every appearance of being a femoral hernia. She was given purgatives to unload bowel, which acted well. Three days later was called to see her and found her suffering very much. I at once advised an operation. She was admitted to my house and operated upon next day. I feared a rupture of pus sac in transit, but fortunately there was none.

An incision four inches long was made and a very tense sac of pus found, which

was drawn off with trocar and found to be between one and two quarts, after which the tumor, thought to be a femoral hernia, disappeared. The pus sac had grown from posterior lateral wall of pelvis. The appendix was found to be healthy, but was removed, however. The pus sac was stitched to abdominal incision, and on each side of attachment it was closed with uninterrupted sutures, without drainage, to peritoneal cavity. The pus sac was washed out with hydrogen, followed with bichloride solution, 1 to 3,000, and packed daily. It healed at once from the bottom. The patient is now doing her usual work. She is still bothered somewhat with a slight discharge from sinus and a cord like drawing of the abdominal wall to the posterior wall of pelvis caused by the atrophied remains of pus sac. I propose soon to do a secondary operation and remove the remains of the pus sac. Her health at present is otherwise good.

CASE 3.—Mrs. W., age 34, mother of 3 or 4 children. In early life health good; had, she said, had several attacks of colic. My friend, Dr. Dodson, was called to see her; found pain, tenderness, and a tumor at McBurney's point; obstinately constipated; pulse 90 to 100; temperature 99 to 103 for several days.

The usual treatment having no effect, he asked me to see the case with him. (With his permission this case was used to illustrate the point). Our diagnosis was appendicitis with pus sac. The patient made no improvement after several days continuous treatment, and it was decided that an exploratory incision should be made, which was done at her home. Upon entering the cavity there was found a large bulk of tissue of new formation, much like fibrous tissue, binding colon and cæcum to posterior wall. The tissue was broken up, no pus was found, and owing to the dense adherence of colon and cæcum to pelvic wall, the appendix was not found. The adhesions were extricated, cavity flushed out thoroughly, incision closed and dressed in the usual aseptic way. Uninterrupted recovery and for over two years no recurrence. Health good. She attends to her usual domestic duties, which she had not done for some time before the operation.

In the three cases given above, relying on the text-books, and from the history and symptoms in each case, any one would have naturally concluded them all to be appendicitis. But as has been shown the appendix had absolutely nothing to do with the matter, and as medicines would have been of no avail, without an incision having been

made, in each case, the outlook for our patients would have been grave indeed, to say the least.

The Use of Suprarenal Extract in Diseases of the Nose and Throat.

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Of the many glandular tissues that have been used for various therapeutic purposes during the past few years, but one has proven of any value for local purposes in the hands of the laryngologist. The aqueous extract of the suprarenal gland as a hæmostatic of great value now possesses a unique place in our list of valuable and tried remedies. First given internally in Addison's disease with some degree of success, it was then used locally by Bates in ophthalmological practice with surprising results, the conclusions he obtained, as published in his original paper, having since been confirmed by other investigators. From the results obtained by various experimentors by the internal and intravenous injection of the suprarenal solution, it was seen that it exerted a marked constricting effect upon the peripheral vessels, especially those of mucous surfaces. This action appeared very rapidly after the injection and as suddenly disappeared and from this general physiological phenomena, its action when applied direct to the mucous surface was readily confirmed. Wood's statement, "it is plain that a drug which acts upon the blood vessels peripherally, that is directly, as powerfully as does the extract of the suprarenal bodies, offers a probability of value as a local applicant," is well borne out.

During the past two years I have used this drug in the various pathological conditions of the upper respiratory tract in which it seemed to be indicated, with the results that warrant the praises already accorded to it in eye work.

As obtained for local use, the dessicated extract of the suprarenal gland of the sheep is superior to that of other animals; the glands are dried in vacuo, powdered and contain a very large proportion of animal tissue. As in its natural state it consists of two parts, a cortex and medulla, the former is represented in the dessicated powder by certain elements which possess

no local action on the mucous surfaces the active principle or ischæmic element residing in the medullary portion alone. Undoubtedly the portion of the gland which possesses the remarkable vaso-constricting properties is not really the histological elements of the gland structure itself, but is evidently a product of the normal glandular metabolism, belonging to the group of so-called internal secretions; the active principle or principles not yet being obtained in sufficient quantity for clinical use. Abel has done considerable experimental work in this direction. The astringent element of the gland is freely soluble in either hot or cold water and to a somewhat less extent in alcohol, the greater the dilution of the latter the more is the solubility increased, while in absolute alcohol, no solubility exists. For practical use, therefore, I have obtained the active element from the desiccated gland by macerating it with water and filtering, the resultant filtrate being used in the conditions for which it was required.

As the drug is unfavorably affected by the addition of other remedies or preservatives, it is well to prepare a fresh solution as desired, although small amounts of antiseptics may be added to the solution without impairing its value to a great extent, yet when it is desired to use the drug for the control of hemorrhage, especially in operative procedures, it is better not to add other drugs to the solution; its full physiological action being at a maximum when used alone. Alkalies or alkaline salts especially interfere with its constricting action, while the mineral acids do not interfere to such an extent. Since the value of adrenal has become more widely disseminated, a number of formula have been advocated in which the main object has been to retain the full maximum of its physiological action and at the same time by the addition of preservatives, obviate the necessity of making fresh solutions daily. Of these glycerine, boracic acid, camphor, cinnamon and alcohol have been most extensively used. While the solutions so made retain their property for a varying length of time, they also possess a fair degree of efficiency, depending upon the nature and amount of the preservative added.

The solution, primarily the basis of whatever compound that may be used, is made by adding ten grains of the dried extract, to one drachm of sterile water, this is allowed to macerate from ten to twenty minutes and filtered, the glycerine, or whatever may be used, being added to the filtrate. Boric acid may be used by dissolving the extract in a cold saturated solution, while

equal parts of camphor and cinnamon water make an elegant preparation but impair to some extent the efficiency of the drug. On account of the large amount of animal matter present in the commercial powdered glands, putrefactive changes are rapidly produced; the solution becoming dark in color, with an odor of putrescent animal tissue and a precipitate is formed. If it is not desired to add the preservatives already mentioned, the solutions may be repeatedly sterilized by boiling, the drug in no way being impaired by the constant repetition of this procedure.

When the aqueous extract of this gland is brought into contact with the mucous membrane of the nose, pharynx or larynx, the parts rapidly become blanched, the smaller arterioles are constricted to such an extent that they appear to vanish from the sight and vessels of greater magnitude which before the application were plainly visible become markedly constricted; so great is the hæmstatic and vaso-constrictor action of the drug. The entire membrane to which the adrenal is applied not only shrinks to a marked extent but rapidly changes in color, depending upon the amount of blood present in the tissues. This astringent action is most marked upon the nasal septum, and especially in cases of acute coryza, where the interior of the nasal chambers is swollen and the tissues engorged, the mucous membrane of the septum being distended by the excess of blood and watery elements in the tissues. It was repeatedly demonstrated in such conditions that the entire picture would change in a few minutes after the adrenal was applied, the redundant soft tissues were reduced to their normal proportions and by the local astringent action the parts were also blanched until they presented the appearances of anæmia instead of congestion.

The drug therefore possesses two distinct actions upon the mucosa of the respiratory tract in positions where it can be directly applied; the first being the absolute blanching of the parts, followed by an almost imperceptible constriction, which, however, rapidly increases until in some regions and in the nose especially, the tissues may be contracted down to the osseous structures, provided fibrous tissue is not present in excessive amounts. This action of blanching and constriction also occurs in the pharynx and larynx, but not to the same degree as in the nose, on account of the great difficulty of retaining the drug in contact with the mucous membrane of the former regions for a sufficient time to obtain its full action. The drug acts only upon mucous surfaces, whether normal or otherwise, no change

taking place when it is applied to serous surfaces or to the unbroken skin, and as the affections of the upper respiratory tract are essentially concerned with the mucous membrane in part or whole, the extract of the adrenal gland is peculiarly of service in this region.

Further, the drug produces its effects by contracting the arterioles and cavernous sinuses by a direct action upon their muscle walls, that is peripherally, this purely local action is well demonstrated by contrasting the contraction of the tissues produced by the use of the adrenal extract and that produced by cocain. The latter, as is well known, not only contracts and blanches the tissues at the original site of application, but by its action upon the peripheral nerves, the constriction of the tissues extends in all directions, a large area being involved, with a greater absorption of the drug than is sometimes desired. This is not so with adrenal for its action is absolutely local, no other tissues are affected other than those to which it is brought into direct and immediate contact. To show this limited result one may, for instance, place a small strip of cotton wet with the solution upon the inflamed pharynx and when it is removed it will be found that the surrounding tissues and even those in immediate proximity to the application will still retain their original inflammatory and congested appearance, while the mucous surface under the application, will be ischemic and, from the contraction, depressed below the level of the surrounding membrane. In other words, the physiological activity is limited to the area of membrane brought into direct contact with the drug.

In epistaxis, whether due to minor traumas, visceral affections, such as those of the heart, lungs or liver, or the result of local affections of the nares, immediate benefit is observed by spraying the nasal interior. Should the blood be oozing from several points, or when the hemorrhage springs from the anterior portion of the septum as is most frequently the case, a small pledget of cotton saturated with the extract and applied to the bleeding point will, in the great majority of cases, cause a cessation of hemorrhage. If the epistaxis be purely of local origin resulting from a small ulcerated area over the anterior septal artery, the use of the adrenal extract will do more than control the bleeding for which it was applied, it will also by its action in dissipating the congestion, to a great extent prevent further hemorrhage from the same place. While, when the epistaxis results from excessive congestion, the result of an organic heart disease for instance, the treat-

ment alone of the more serious disease of which the epistaxis is but a symptom, will prevent further attacks; in these cases the field of usefulness of the adrenal being limited to the control of the active hemorrhage. Several cases of epistaxis were seen which had resisted many other applications for varying periods of time, so that the nasal bleeding assumed a character which may with propriety be designated as chronic. After several applications of the adrenal had been applied at varying intervals of time, the bleeding permanently ceased and has not returned, while previous to this the hemorrhage would occur several times a week for from three to five weeks, while in one case it had occurred almost daily for five months.

To the long list of drugs recommended in the treatment of vaso-motor rhinitis, or hay fever, must be added the extract of the adrenal gland. Since it was first brought to the attention of the physician, it has been used both locally and internally, the latter method being used by Solis Cohen on himself with some measure of success, but such favorable results from its internal administration in hay fever has not occurred in my hands. He uses it in this affection in tablets each containing five grains of the desiccated gland from three to five hours apart, depending upon the relief obtained. In a number of cases seen during the past two seasons, this method was used but without any success at all; in fact some of the cases experienced discomfort even when used in smaller amounts and it had to be promptly discontinued. Possibly when used in this manner it diminished the excessive nasal secretion to a very slight extent, but the other symptoms were unaffected and the amount of relief obtained was so small that its internal use was given up.

Locally, however, it deserves a prominent place among the remedies used for this protean affection. It will restore the patulency of the nasal passages, greatly diminish the secretion, reduce the attacks of sneezing until they no longer torture the patient, and if used at frequent intervals in conjunction with whatever line of treatment may be indicated in the individual case, the terrors of this affection will be greatly ameliorated and the patient will be able to pursue his occupation with considerable comfort. It may be applied either by a spray or by cotton plugs, depending upon the degree of nasal obstruction. In cases where the turbinates were jammed against the septum and the patient was obliged to resort to mouth breathing, my method has been to use a coarse spray of a fresh solution, freely into both nostrils; in the course of a

few minutes the turbinal cavernous tissue will contract to a sufficient degree at the anterior extremity to allow of further spraying to a portion further back which has not been reached by the solution; this is repeated until enough space is obtained to admit of a long strip of absorbent cotton saturated with the drug, which is placed the entire length of the middle and inferior turbinates on both sides of the septum and kept in position for a variable period. As a result of this procedure the amelioration of the symptoms as described above will be produced and these results may be maintained by directing the patient to spray the solution into his nostrils at sufficient intervals.

It must not be assumed that suprarenal extract is in any sense a specific in hay fever; it is not, but it is the most valuable single remedy that we possess for the uses as indicated, and as the etiology of this disease varies in almost every affected individual, so must our methods of treatment vary to suit the individual case, the adrenal if used intelligently and in conjunction with both local and general measures, giving results which have not been previously obtained when it was omitted.

One of the minor disagreeable features to both patient and surgeon alike, in operative nasal procedures, is the post-operative swelling which invariably occurs when a deflected septum is straightened or the inferior turbinal cauterized. Very often the Asch or Mayer tube which fits snugly, immediately after the septum has been replaced, will slip out of position and great difficulty is sometimes experienced in replacing it. It is in these cases especially that the extract is indicated, a spray of the solution will rapidly dissipate the swelling and the original support may be inserted with the greatest ease. A similar spray in the hands of the patient will, if used every few hours, keep the swelling down and also aid to a considerable extent in the healing process. After cauterization of the inferior turbinate body with secondary congestion and swelling it has been my custom to insert a pledget of cotton moistened with the solution, the result of this being that the tissue cauterized heals much more rapidly than it did previous to the use of the adrenal, and of still greater importance and the danger of synechia is entirely eliminated. A certain amount of traumatism invariably occurs in endo-laryngeal operations and the frequent use of the iced adrenal spray, not as coarse as that used in the nose, has proven of considerable value in my hands.

The effect of the drug upon the healing

process after any operation upon the mucosa of the upper air tract, will depend, all things being equal, upon the sterile character of the solution employed. If the adrenal extract has been sterilized by heat and any danger from it infecting the parts removed, it will be seen from day to day, that the tissues heal much more rapidly than without the use of the drug. My experience in this respect being that the drug possesses more than the power of constricting and blanching the tissues, but that it also is a nutritive as well, its frequent local use improving the nutrition of the parts and thereby aiding in the reparative process.

While secondary hemorrhage in the hands of the experienced laryngologist is not of frequent occurrence, yet its dangers are constantly in evidence after operative procedures upon this region and anything that will diminish the tendency to secondary bleeding will be of particular value. In adrenal extract such a remedy exists, its use in all operations has in my experience greatly eliminated such dangers.

By far the great class of cases in which the drug is indicated for daily routine use, is in the local congestions of the mucosa, either acute or chronic. In all the acute affections of the upper air tract, the spray of adrenal will give prompt and efficient relief, especially in the early stages of catarrhal inflammations. When used at frequent intervals it is superior to any remedy we possess to abort the incipient congestion and even if the case be not seen until the later stages, much good can still be accomplished. It does good in these cases by contracting the vessels and forcing the blood out into the general circulation, relieving venous stasis and preventing the accumulation of glandular secretion by its astringent power. Swain in referring to its use for such purposes remarks that "in acute congestions it has its widest application and greatest opportunity for good, but also in certain chronic conditions of the hay fever type, where œdematous tissue seems prone to develop, it can be relied upon as one of the most helpful adjuvants which we have at our command." Under its use congestions diminish, pain is relieved by the withdrawal of blood from the parts, the comfort of the patient is considerably enhanced, and in those cases which are not seen early enough to abort the inflammation, the progress of the affection is materially shortened.

In chronic congestion of the mucous surfaces, the action of the extract is not as decided as in the acute form, as in this class of cases there is more or less vascular paresis, infiltration of liquid and cell elements

through the submucosa and hyperplastic changes have taken place that materially alter the histological elements. Velich has also directed attention to this point, but at the same time it must not be forgotten that this statement applies especially to the spray, as the retention of the extract in contact with the tissue, even if a decided degree of true hypertrophy exists, for a short time will produce the physiological action. In short the drug is indicated in all acute and chronic conditions of the nasal pharyngeal and laryngeal mucosa, characterized by excessive engorgement of the vascular channels.

It is contraindicated in anæmic processes and in conditions where the mucous membrane possesses a low degree of vitality or insufficient nourishment, as under these circumstances its use will be attended with a still greater impairment of blood supply with consequent lack of nourishment.

When the pharyngeal mucosa is relaxed with a decided loss of vaso-motor tonus, the secretions increased and the parts sensitive, a step towards restoration to the normal may be obtained by appropriate general medication and by painting the pharynx several times a week, with a solution of adrenal of the strength of twenty grains to the drachm of sterile water. The use of this drug for the relief of coryza has practically been discussed under acute catarrhal inflammation, but it should be remembered that the sole reliance should not be placed alone upon the suprarenal extract; it is but a part of the local treatment and at the same time appropriate constitutional medication must be instituted should the necessity for such arise.

The most striking and to some extent the most successful field for the use of this drug in rhino-laryngology is in the operative procedures upon the upper respiratory tract. The various methods of straightening the septum, the removal of spurs and similar operations may be performed with but the loss of a few drops or not any blood. Not only is this a great gain to the operator, as it allows full visual control of the entire field of operation, but the absence of the profuse hemorrhage, so common in nasal operations, is decidedly reassuring to the patient, especially if it be a nervous woman or child. The ordinary nasal polyp is readily removed without the loss of a drop of blood, but where the highly vascular turbinal tissue is removed to a considerable extent, the adrenal solution will diminish the bleeding but not entirely control it as in other intra-nasal operations. Quinlan removed a naso-pharyngeal fibroma without bleeding by applying the solution freely,

but usually in these so-called bloody operations in the naso-pharynx it is almost impossible to prevent considerable hemorrhage. I have found it of no use as a hæmostatic in removing adenoid tissue of the pharyngeal vault, and the same has been my experience in tonsillectomy; in both instances the great difficulties in the way of retaining it in position until the tissues are contracted, preventing its successful application under such circumstances. For controlling the slight hemorrhage resulting from the removal of small growths from the larynx, it does very well, but its chief field of usefulness in operations, is to my mind, to the greatest extent limited to the nasal interior.

The successful use of suprarenal extract, both in the control of active hemorrhage, the prevention of post-operative bleeding and the elimination of consecutive swelling, depends upon the manner in which it is applied. As a result of my experience in a considerable number of operations in which this hæmostatic was used, it was found that the spray alone was not sufficient, as by this method the drug did not remain in contact with the tissues for a sufficient time to contract all the vessels. The best method of applying the drug is as follows: The parts to be operated upon are covered with a pledget of cotton saturated with the adrenal, which is allowed to remain five minutes, this is removed and a solution of cocaine or eucain, of whatever strength desired, is applied in the same manner for a similar length of time, this is also removed and a fresh piece of cotton with the adrenal solution is again pressed against the tissue for another five minutes, and when this is removed it will be found that the parts are perfectly bloodless and totally anæsthetic. The operation can then be readily performed without pain to the patient and with great satisfaction to the surgeon.

How long is the anæmia and tissue contraction maintained? That will depend upon varying factors, the time it is allowed to remain in contact with the tissues, the method of application, the strength of the solution used, and also to a great degree upon the nature of the tissue and its pathological condition. The majority of cases will show some anæmia of the mucosa from one to five hours after the drug has been used in this manner and in the strength previously mentioned. While in some few cases of acute congestion, decided action was evidenced for twenty hours. The amount of shrinking and ischæmia also being dependent upon these conditions, being greater in acute than in chronic congestion

and being also more marked in the nose than in the throat.

While the constricting action of the adrenal has been compared to cocain and while in this respect it, to a certain extent, resembles that drug, yet it is in no way anæsthetic, but it does to some extent increase the anæsthetic effects of cocain or eucain by retaining them in the tissues and also by the anæmia produced, the anæsthetic is not immediately washed out of the tissues as soon as they are incised. In this manner, therefore, I have found it to be a valuable adjunct in the production of local anæsthesia. And further, as a result of this, the same degree of anæsthesia may be produced by weaker solutions of cocain, and thus the toxic effects of the latter are to a great extent avoided.

Adrenal possesses absolutely no action upon the blood itself, unlike other astringents, as iron for instance, the fluid blood remains unchanged and shows no tendency towards coagulation; for this reason it is perfectly clean and does not cause subsequent irritation from firm, hard clots as occurs in other remedies used to restrain bleeding. Another quality of importance possessed by the aqueous extract, is its non-irritating character. Any portion of the air passages may be frequently sprayed with the drug in almost any quantity and in all the cases in which I used it, irritating effects were never observed. It is a sedative astringent to mucous membranes.

As before noted it may be compared to cocain in some respects, but unlike this drug, no vicious habits ensue to the individual after its repeated use and it may be freely placed in the hands of the patient for the various purposes already outlined in this paper, with the confidence that no habit will be formed. To the part to which it has been applied, absorption is for the time being prevented and no constitutional or untoward after-effects are observed, as the solution by vascular contraction is retained in the local tissues and does not escape into the general circulation. Finally the adrenal extract may be repeatedly used in the same individual without loosing any of its effects, the tissues responding just as promptly after it has been applied for weeks or months, as they did when it was first employed.

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Pseudo (?) Smallpox.

By Jno. R. Rose, M.D., Eastman, Ga.

Whenever a question of diagnosis assumes such proportions as to become of national interest, as has been the case in the late epidemic of a varioloid nature that swept this country from Florida to Minnesota, it is the duty of every member of our profession to record facts that may tend to throw light upon such a vexed question. Believing that I have such facts to record, I make that my apology for appearing in print.

In our county (Dodge) we have had several hundred cases of this disease which, though it had been pronounced smallpox by different experts brought here from other parts of the State, had yet resulted in nothing more serious than unpleasant friction among local physicians who differed as to its name and nature. As showing the benign nature of the disease, I re-

member that passing by a school house in a certain part of the county where the epidemic was especially prevalent, I saw out of perhaps 35 or 40 pupils who were romping and playing during recess nearly one-half of that number who were broken out with the eruption, yet who seemed just as lively as the others; vaccination had been tried in the beginning by a few of our people, but the majority preferred the disease to the vaccin sore, especially as it developed later on that vaccination did not seem to protect against it.

In the latter part of April of this year, when the epidemic seemed to have about subsided and I had not heard of a new case for some time, I received two calls one day to go to two houses in the southeastern part of the county where, I was told, some people were very sick with this "breaking out," as it was called. When I got to the first house I met with a stunning surprise. I found the patient, a farmer, in the secondary fever of an unmistakable case of smallpox. This was quite a blow to me, for I had held out all the time that we were not dealing with smallpox in this epidemic, but with some other eruptive disease, yet here was a severe case of variola vera about which I could not be mistaken for I had seen many cases in former years, in fact, had been through a case of varioloid myself. Had I then been mistaken all this time? Had I made myself ridiculous by resisting the opinion of men whose claims to be experts in this matter I had ridiculed? Well, it was a pretty bitter pill, but I did not hesitate to tell the anxious wife that her husband had smallpox and to advise proper measures. Somewhat cast down, yet wishing to learn, if possible, from what kind of a case the present one had developed, I asked the wife if she knew where he had caught the disease and she told me "from nursing his brother." Now, I knew from personal knowledge that the brother whose name she mentioned, had had this eruptive disease about 4 or 5 months ago, and I therefore told her that she was mistaken—that if her husband had caught the disease from his brother he would have had it long ago and would not have waited till now. "But," said she, "His brother has just had a second attack of it and his whole family has been sick this time, even those who did not have it before and they all like to have died with it this time, they had it so bad; "there he is," pointing to a dark part of the room, "you can look at his face and tell what a bad case he had of it."

The man's face was badly scarred, and as far as could be seen at this time and from what I could learn by questions, he must

have had a confluent case of smallpox, and yet he and two of his children had had the eruptive disease four or five months ago. I felt better by this time, for I saw he could not have had two cases of smallpox within six months of each other; I recognized the fact that I had to deal with a new infection, differing from the old epidemic, and that this new infection was smallpox and it remained now to locate the starting point. After some more questions I learned the following facts, which I verified later on:

About seven or eight weeks ago there came to this part of the county a recently discharged soldier from Cuba on a visit to a relative, Mrs. B., a widow. He was sick when he arrived, complaining of headache and pains, and left in a few days for his home in another county. Some ten days after his departure Mrs. B. was taken sick with what was thought to be the prevailing disease, but unlike every other case, she soon was violently ill and a physician residing in that part of the county was called in who pronounced it smallpox. From all I can learn, Mrs. had quite a serious case and before she was convalescent, her son and daughter-in-law and their baby, who had come to nurse her, were all taken sick with the same thing; the baby especially was very ill and had not quite recovered when I saw it later on. Young B.'s mother-in-law, who came to nurse her daughter's family also took the disease shortly afterward, went home and communicated it to nearly her entire family, some eight or nine people, one daughter alone escaping. Among them was one daughter, a girl of eighteen, who had a most virulent case of the confluent type, her entire body, from the vertex to the toes, being a solid shield of crusts when I saw her, four days before her death. It next broke out in the family of my informant, who had been to young B.'s house a few times to help nurse the sick, and from there it spread till it numbered about forty cases before it was checked by vaccination, isolation and disinfection; of these one died; another one of my cases was of the confluent type, the rest of those I saw were mild, discreet cases but nearly all were pretty sick and all but two of my cases had secondary fever. These two were so mild that had they not had the other eruption about three months before, I should have hesitated about the diagnosis. Among these cases there were said to have been twelve or fourteen who had the first eruptive disease from two to six months before they had smallpox, but from my own personal knowledge I can vouch for only three whom

I saw both times, and two more whom I saw with smallpox and for whom I had prescribed previously for the other trouble without, however, seeing them at that time. What the first epidemic was I am not prepared to say now. I took it to be chickenpox at first, though it attacked adults and children indiscriminately; that it was smallpox, I believe less than ever, for I think it next to impossible that in so small an epidemic there could have been such a large percentage to have the disease twice in so short an interval. That our first eruptive epidemic was the same as that prevailing in other sections of the State and country, I have no doubt, for medical men from different sections saw our cases and pronounced them so, and people have come here from other infected places with the disease and it proved the same as the home article. I believe that the true solution of this vexed question of diagnosis must be sought in the possibility that in many instances we have had to deal with a mixed infection, that a harmless disease has been running side by side with true smallpox and that the nidus of the latter infection has been the returned soldier from Cuba and Puerto Rico. In cities with efficient quarantine provisions it would be next to impossible to recognize such a mixed infection, for the means adapted to stamp out smallpox would doubtless prove sufficient to stop all eruptive contagion of as mild a nature as the epidemic under discussion and it would be difficult to find a case showing two consecutive attacks, while in those places where the milder disease only was found it is not difficult to understand that physicians, and especially those acquainted with smallpox, should be loath to call it by that name.

I do not believe that the cases I have cited are the only ones that can be found; there must be other places where conditions were similar to those in this county, where the prevailing light epidemic was followed by one of a severer nature in which each infection could be clearly traced to a source that proved to be an importation from some region infected with true smallpox and where both diseases attacked the same person. The soldier boy who started the trouble with us did not stop at that, however, he went home to his own county, had the smallpox and started an epidemic there from which, as I have since learned, several persons died.

A man in Red Bank, N. J., had 50 fits in a single day and he still lives. He is indeed a living example of Darwin's theory of the survival of the fittest.

Bacterial and Auto-Intoxication in Health and Disease.*

By Paul Paquin, M.D., Asheville, N. C.

Part of this title, on first thought, may seem paradoxical, in as much as one can scarcely conceive that intoxication and health can be co-existing. I hasten therefore to explain that both bacterial and auto-intoxication may appear under outwardly normal condition of the organism.

As to the distinction I make in the title between bacterial and auto-intoxication, there is reason for it only to the end of indicating that some forms of intoxication proceeding from within the system are purely bacterial in their incipency, while others are begotten by the structure and functions of the body. Consequently, in strict language, one may with justification term auto-intoxication forms of poisoning proceeding from any source within the organization. The latter position has been taken by most of authorities.

Notwithstanding the still very general course of the profession to-day, in carrying out its work of beneficence in modifying pain and disease as if the body were a unit, it has been established beyond the necessity of discussion that the system is an aggregation of microscopic individuals with separate lives working co-ordinately in their union for the maintenance of the existence of the whole. This much we can appreciate clearly and from this knowledge we may form logical conclusions in the treatment of disease. It is necessary, however, to realize more than this fact of cellular union of the marvellous "republic of man" to arrive at a correct understanding of health and disease and the causes thereof. It is important also to conceive of the nature of the structure and functions of the cells themselves.

The cells, including those floating in the plasma of the blood and the lymph, are not mere particles of matter. They have a frame work and their constituting chemical elements include substances among which some are actually poisonous, as potass, for instance. Their functions in health or disease may produce toxic elements of diverse kind as urea, ammonia, some alkaloids, etc., etc.

For the study of auto-intoxication, these factors need careful consideration. But the first step should be the investigation of the organization in health.

What is health? Health may be defined as the exact equilibrium in nutrition of the

*Read before the Buncombe County Medical Society.

cells of the body. By this equilibrium of nutrition the cells maintain proper equilibrium in their forces and activities. By faulty nutrition on the other hand, the cells fail in their functions, produce substances capable to deteriorate modify structure, bring about changes, disproportions, perversions.

We may safely proceed then, in the study of auto-intoxication, from the postulate that normal cellular assimilation is healthy life, and that disturbance thereof is disease, no matter what the cause. The chief purpose in this paper being to draw attention to the too frequent neglect of the general influence of auto-intoxication in any disease, and to a few very common acute and chronic auto-intoxications separate from classified maladies, I will try and restrict my review to the essential points of interest.

In the first place we must consider the production and elimination of toxic substances. The body is a laboratory of poisons. It creates them constantly in health and disease and within its alimentary organs bacteria are incessantly at work producing noxious matters. We are therefore always exposed to some form or other of toxemia. Elimination is our chief means of salvation.

Among the most important of the toxic products of the normal organism is urea, the toxicity of which has been shown clearly by Bouchard. The symptoms it produces when retained in the system are too well known to need analysis. But urine contains, abnormally at least, some other poisons, among which are substances that produce narcosis. It may also contain coloring matter that is poisonous. The liver produces some poisons. It is well established that retained biliary acids may cause grave or even fatal accidents. Even in the very intimacy of the muscles poisons of serious import have been discovered.

All of these poisons are elaborated by the tissues and are ever present. It is against their increase and their retention that we must guard ourselves and our patients. But there are also poisons produced in the tissues by disturbances of nutrition. These are accidental, abnormal. From these few facts, culled from hundreds no less important, we may lay the proposition then, that our own cellular organization elaborates and excretes and secretes two kinds of poisons—natural and abnormal—from which we are preserved chiefly by elimination.

As complicators of these poisons, we also have the destructive poisons of perpetual bacterial life in the alimentary canal. The poisons they produce by the decomposition

of food and excrementitious matters are varied and more or less serious. Individually, collectively or associated, they are more or less grave factors in modifying our happiness and safety. In classified diseases, as typhoid fever for instance, or scarlet fever, or pneumonia, or any malady reducing the nervous control and special functions of the cells of the digestive apparatus; indeed in any condition lowering the general defensive power of the organization as a whole, the microbes of the alimentary tract may become most damaging enemies. Apart from the diseased conditions in which the bacterial poisons become dangerous factors secondarily, few people exist who have not suffered digestive disturbances with fever, primarily due to the addition of bacterial poisons formed in the digestive tract to the poisons of the system naturally there.

We have spoken of urea as a prominent poison of the system. However, the complex condition known as uremia, in which urea plays doubtless a prominent role, includes as causative agents various toxic substances derived from the intestines, food and bile. The increase of these different elements therefore or obstruction to their expulsion, may produce auto-intoxication. Stricture of the intestines and excrementitious barriers produce such poisoning by forcing reabsorption of these toxic agents. If, in addition to these the germs of the alimentary canal are favored in their vegetation, they add more or less seriously to the disturbances and intoxication. They produce their poisons in large quantities. Various manifestations of digestive disturbances follow. These are known by various names, and may present themselves variously, but they are indefinite maladies more or less protracted in the alimentary tract, and are due on the one hand to natural body poisons, and the other, to microbe products. The formation of gases and different putrefactive elements; the creation of acids which irritate the intestinal mucus surface and cause the formation of mucus, are due to auto-intoxication of a more or less mixed character.

We may ascribe to absorption of poisons also, the hypochondriatic manifestations of the constipated person no less than their headache, vertigo, their buzzing in the ears, the depression, their perversion of nerve sensibility, their general lassitude, their various psychic disorders. These expressions of the organization in so-called intestinal dyspeptics, are symptoms of auto-intoxication, only they are usually chronic forms.

So we have in the alimentary laboratory several sources of the generation of poisons:

the bile; its constituents and some of its derivatives; bacterial and other products of the intestinal matter. From these we get acute and chronic auto-intoxication, which may, as we have seen, complicate a regular disease or may produce disturbances by their own effects when reabsorbed.

I have said at the beginning that the cell structure contains poison. The most important is potass. As long as the cell is not killed and its constituent elements are not liberated its poisons do not produce intoxication. But when destroyed the poisons enter the circulation and may play a deteriorating role. For instance, conditions that break up the red corpuscles produce poison. Though I have not seen it stated, it seems to be more than probable that the cause of rigors and fever in malaria proceeds from the known destruction of the cells and the liberation of their constituent elements. This, however, is an auto-intoxication of a classified disease. I mention the case only to show the toxic effect of a destroyed cell. I might adduce also the absorption of pus, which contains not only the poison of the bacteria growth that may be responsible for the death cells, but also the poisons of the structure of the latter.

To carry on this review farther means to enter in labyrinthical channels that would demand long and laborious work. I shall conclude by drawing some practical deductions from the observations made.

I have said that elimination is our safe-guard and so it is, and of all the organs of elimination, the kidneys are the most important to carry out poisons. The bowels of course share largely in the protection of the system, but work chiefly as preventative, by expelling poisons before their absorption. Then, the measures of intestinal disinfection, as with calomel, which is supposed to be transformed into bi-chloride in the stomach and black sulphide lower down; and the measures of intestinal irrigation or of inducing copious evacuation, are naturally suggested. But an absorbed poison must come out through the emunctories. Of these, experimentalists have demonstrated that the kidneys must perform the greatest share of the work of elimination. The kidneys therefore should be considered in the treatment of auto-intoxication.

To the liver is ascribed also some power of interference with some products of auto-intoxication. The alkaloids, we are taught, are interfered with by the liver and possibly wholly destroyed. It is thus that the intestinal alkaloids, reaching the portal circulation, fail to do much damage as long

as the liver acts well. Doubtless the lungs and skin eliminate some poisons too. It were not surprising to me that the great perspiration of phthisics is in a measure a natural process of elimination of toxic products.

In the discussion of this paper I beg your indulgence. The subject is so exceedingly broad and leads into so many avenues of pathology that it is impossible to do more even in a paper restricted to a few points, than to skim the surface of the questions involved.

I trust, however, that my meagre presentation may not be wholly barren of fruit.

DISCUSSION.

DR. PEAVY.—I would have liked very much to have seen the paper beforehand, and have had some idea of what the doctor was going to say. It is a very important subject. No question, perhaps, in the whole field of medicine has assumed such proportions as the subject of poisoning, either by the liberation of products by the system itself, which failing to be eliminated properly, accumulate and produce intoxication, or by the absorption of the products of microbial life, which are deleterious to the human organization. It seems to me that the term auto-intoxication ought to be limited to such conditions, developed by the liberation of materials in the organism itself, which become poisons. Ordinarily absorption of toxic material in the alimentary canal is classed as auto-intoxication, but that, it seems to me, is not properly included in the meaning of the word. I differ with the doctor in one point. He makes auto-intoxication and bacterial intoxication possible in a condition of health. I think when the absorption of deleterious products amount to intoxication, it becomes a departure from health. Absorption from the alimentary tract has risen into great prominence lately. The question of infection by germs getting into the system by that route is being discussed very much recently as well. One class of absorptions from the alimentary tract might properly be considered a kind of sapremia and not properly bacterial intoxication, the germs elaborating the poisons in really leading a saprophytic existence in the intestine.

The question of intestinal antiseptic is a practical question of importance in connection with our subject. We all of course have used creosote in tuberculosis, and sometimes with the result that our patients gain weight and vigor. To my mind these results are due to the action as an antiseptic in the alimentary tract. It has been shown

that certain petroleum products like vaseline or glymol, or things of that class, will act as tonics and build up the patients quite as well as cod-liver oil, yet it has also been shown that they pass through the alimentary canal without any loss. The quantities taken into the mouth have been recovered from the dejecta of the patient. It seems to me their effects must be due to some action they have in inhibiting the development of toxic materials in the alimentary canal. They are not strictly germicides, but through their physical properties they perhaps interfere with the nutritive process of the germs in the alimentary canal, preventing their multiplication, thus indirectly improving the nutrition of the patient.

DR. BALLARD.—I think that the commonest observation will lead any one to judge that the elimination of the products of poison in the system are the very basis of all medical treatment, and I think a great many times it is neglected too much. I think in this day of science they seem to have lost sight of some facts obvious to every one who opens his eyes and watches. I see it is stated that the system of the Boers is very simple, founded on their observation and common sense. They commence the treatment of all diseases by giving a purgative. I think I do pretty much the same thing. I never have seen a time when I thought I had reason to regret it. I believe that in almost every sickness we have in this latitude it will do well to give them a good cleaning out. This process of building up and tearing down is going on all the time, and of course when the process of tearing down is greater than the process of building up, whether the origin of that be in the nervous system, possibly advancing age, overexertion, effect of excessive heat, or anything else that inhibits the constructive process and increases the destructive, it is apparent what the main line of treatment should be. You must clear out the products of dissimulation as fast as they accumulate.

DR. MCBRAYER.—There is no doubt, as Dr. Ballard has said, that we all agree with the practical part of the doctor's paper, and I reiterate his statements and I suppose, to put it in plain language, you might say, with Dr. Ballard, that in almost every disease which we are called to treat it is a good idea to flush the sewers. I heard Dr. Love, a very eloquent speaker, too, in speaking of appendicitis, say that he flushed them from both ends, and that is often a good idea, especially in auto-intoxication.

DR. AMBLER.—I do believe that this question of auto-intoxication is one that

is very little understood, that is, in comparison with the great results which are accomplished by these two methods. I understand by auto-intoxication the trend or range of symptoms which you get following the absorption of the ptomaine, which may be of bacterial origin, or some chemical poison in the body itself, and by auto-infection I understand a person may have some disease, for instance, tuberculosis, and that person can still infect himself at some other point where he has not had the disease, and that is a case of auto-infection. Dr. Ballard has referred to the practical side of the question. That is all right, but I think Dr. Paquin brings up a subject which we have little studied. For instance, Dr. Ballard is called to a case of biliousness, and among other symptoms the patient is dizzy and has a headache. Dr. Ballard says that he is bilious, but if we are going to sit down and be satisfied that he is simply bilious and not try to find out what that means, we will not get ahead. These symptoms only show there is some chemical poisoning going on, and Dr. Paquin's paper is written with an idea of giving us a discussion of that kind of poisoning. You can take almost any symptom which we have, whether fever, chill, perspiration, headache, or almost anything, and the great majority, while we put them down as symptoms, are due almost without exception to the infection and auto-infection which has taken place in the laboratory of the body. I think the paper is one which ought to be discussed at length. I want to say I thought Dr. Paquin stopped as soon as he commenced. If he were to continue this paper and take up special points and follow out intoxication of different kinds it certainly would be a very interesting paper.

DR. REYNOLDS.—There was one point Dr. Peavy objected to in Dr. Paquin's paper, that is, as to auto-intoxication in health. Strictly speaking, we may not be in perfect health, but I believe every human being is undergoing some change, and there is some poison, some intoxication going on in the system all the while, and just so long as the white corpuscles, Nature's army, are able to hold them down, we show no evidence of disease, and as soon as they fail to accomplish their aim, then we show this auto-intoxication in the form of disease.

DR. PEAVY.—My point was simply this, that of course there is liberation always as the result of normal metabolism, which if existing in excess would become intoxicants.

DR. AMBLER.—Can you imagine a per-

son who is perfectly healthy?

DR. PEAVY.—Health is not a definite, straight line. There may be variations of conditions within normal limits. If these variations are due to absorption of toxic materials from any source, and exceed normal limits, we are sick. Of course the question is just on the meaning of the word intoxication. I make the point that whenever we get enough of these materials, whether they be the result of our own normal metabolism or due to microbic action, if that absorption and retention amounts to enough to poison us, so that it could be called intoxication, we are not in a state of health.

DR. BALLARD.—I do not think we should use the word intoxication unless the patient is intoxicated. A man may be drinking a little whisky along every day and provided it is eliminated as fast as he takes in he is not intoxicated. Another man takes a great deal more, and he cannot stand up and talk or think straight, and then we say he is intoxicated, and so it is in disease. No doubt these poisons are collecting all the time and we are all the time being poisoned, but if the elimination keeps pace with the accumulation we do not get intoxicated.

DR. PAQUIN.—I appreciate the various remarks about the paper. It is a fact that it is simply a skimming of a very broad subject. Dr. Ambler is perfectly correct in making a discrimination between auto-intoxication and auto-infection. The latter is a re-infection of a new locality, of disease already existing in the same body. What I meant to bring forward was simply the question of auto-intoxication, due to the various poisonous products of nutrition, dissimulation and bacteria, as well as the products of destruction of the cells of the body. For practical purposes I conceive that we cannot draw a straight demarkation line between the different forms of auto-intoxication. Dr. Ballard says that we cannot conceive of a man being intoxicated until he is drunk. However, I interpose that intoxication is a question of degrees of nerve poisoning. One thimbleful of alcohol may muddle one man, and not another, but there is no question that if absorbed it acts on the system, and to that degree is intoxication. Whether the poisoning process is due to the destruction of the blood cell, or to re-absorption of material from the alimentary canal, if there is absorption of some poison made within the system it is auto-intoxication. The bacteria producing the poison come from the outside; in the alimentary canal they exist because we swallow them; and they exist in the lungs because we inhale them, but

those are their abiding places in any event.

We must in all diseases realize first of all that we are not a unit; that every organ is formed of cells having individual lives, but working co-ordinately for the benefit of the whole organism. It is from that point of view that we can realize the nature of auto-intoxications of any character. If we have an abscess anywhere in the system we may have poisoning not only by germ toxins but also by poisonous substances that constitute the structure of the cells. There is no poison in the malaria parasite for instance, and yet we have fever. The toxemia here seems due to the poisonous material of the cell itself, probably potass to a degree. So that we have, in my judgment, the phenomena of auto-intoxication in many diseases, exhibited by various symptoms foreign to the symptoms of the disease itself. It has been said here, in this discussion, that the white cells are the chief defenders of the body. That is true in a measure. It is true where the white cells can go and destroy germs, but the white cells do not go into the alimentary canal. If there is any phenomena of putrefaction or fermentation going on in the alimentary canal poisonous alkaloids are produced. These are not destroyed by white cells, but by the liver, if it acts properly. This has been proven fairly by many observations, particularly by Bouchard in Paris. He has shown that the alkaloids produced in the alimentary canal are destroyed after absorption in the portal circulation. We have, then, in many diseases, phenomena of toxemia which are foreign to the disease itself. They are complications, in fact. Take typhoid fever, for instance. You may have intoxication not clearly of the typhoid type that is due to the absorption of poisons produced by other germs than the specific of this disease. We meet also symptoms of various kinds among children, particularly in the summer time, wherein often irrigation of the bowels or calomel restores the equilibrium. That result is due to disinfection and expulsion of morbid material. But we cannot judge of auto-intoxication and its value simply by realizing that there is a poison in the system to be disposed of. That is, of course, the first point. But we must also realize that the nervous system, if deficient, will sometimes fail to respond, and toxemia will then become serious, whereas it would have been slight if the nerves had properly controlled the emunctories. It follows, then, that in any disease there should always be kept in mind the fact that toxemia may result from absorption of poisons formed in the alimentary canal, poisons of disassimilation, poisons of cell

structure, etc., or the failure of the emunctories to carry them out. The question of the quality of health has been raised. I doubt if there is anybody in perfect health, but theoretically I think we can say with truthfulness and scientifically that perfect equilibrium in the nutrition of the cells is good health, and the moment that this equilibrium is destroyed it is ill health. The variation may be so slight we may not notice it, but the equilibrium is wanting just the same. I had hoped for a further discussion, because auto-intoxication is something that we meet every day. We always have to guard against it. I think it is a subject worthy of deeper study and greater consideration by every physician.

Subarachnoid Injection of Cocaine.

By J. E. Massey, Jr., M.D., Rock, Hill, S. C.

Having heard and read reports during the past six months concerning the subarachnoid injection of cocaine as a method of producing general anesthesia of the lower half of the body, and also having heard of the performance of both major and minor surgical operations by use of this method, I thought at sometime, when opportunity offered, to test its practicability.

My object in writing this report of a case is that I have seen nothing concerning this subject, in any of the medical journals, from the physicians and surgeons of the south, although such cases may have been reported.

A short time since I read a report by Dr. J. B. Murphy, of Chicago, in which he cites a long series of cases of various kinds, operated on by this method of anesthesia, and his results were so wonderful that, twenty or thirty or perhaps only a few years ago, to have heard of such reports and been told that a hip joint amputation, or a hysterectomy, or nephrectomy, could be performed and an interesting conversation carried on at the same time with the patient, would have sounded like a fairy tale or one worthy to rival those of Baron Munchausen.

But these results were so remarkably successful, and the technique of this method of anesthesia was so minutely described by Dr. J. B. Murphy, that by the suggestion of my father, Dr. J. E. Massey, Sr., we decided to test its efficacy as an anesthetic in the operation for piles, and we have the honor of presenting the following report of this case, hoping that it will contribute its small share toward the advancement of medicine and surgery.

HISTORY.—Peter S., colored, male adult, age 45 years, well developed, but gives a history of syphilis contracted twelve years ago, for which he took thorough treatment for a while, but not quite long enough. Also gives a history of being afflicted with piles for the past ten or fifteen years. On examination, patient is found to have both external and internal piles in an aggravated form, and also on the posterior wall of the rectum, and just above the sphincter, is found an ulcer about the size of a quarter-dollar, and he wished to be operated on at once as he was suffering.

On the morning of September 22d, the patient having been prepared by a cathartic given the previous night, and followed by an enema in the morning, we operated upon him, several physicians of the city being present to see if the anesthetic would be successful. The patient was placed upon a Buchanan operating table, and was requested to sit up and lean forward, putting the muscles of the back in tension. The site of injection was sterilized, and with a sterile syringe, carrying a needle three inches long, thirty (30) minims of a 2 per cent. solution of cocaine, previously sterilized by placing in a hot-water bath—allowing to boil for fifteen minutes—were carefully injected into the subarachnoid space, between the 4th and 5th lumbar vertebrae. The point of the needle was entered a little to the right of the midpoint between the spinous processes of the 4th and 5th lumbar vertebrae, and directed a little inward and slightly upward, and the needle was pushed in a distance of about $2\frac{1}{4}$ or $2\frac{1}{2}$ inches, until a few drops of cerebro-spinal fluid was seen to escape from the needle, and then the syringe was attached thereto, and the solution slowly injected.

The operation was begun about twelve minutes after the solution was injected, but possibly it could have been started sooner. The patient was placed in the median lithotomy position, and the parts were well cleansed. The operation was by ligation, which I prefer, each pile being transfixed at its base with a needle armed with a double silk ligature, and tied off in separate halves, then one of the ligatures being thrown around the whole pile, so as to prevent hemorrhage, if a vein of much size has been opened by the needle and by tightening of the ligatures. It is a well known fact that if one operation is painful and demands a profound anesthetic with chloroform in order to prevent the patient's flinching and groaning, that operation is the forcible dilation of the sphincter ani.

As soon as patient was in position and the parts cleansed, then entering the thumbs

in the anus, I very forcibly dilated the sphincter muscles, and while this was being done the patient did not flinch at all, and in reply to a question as to whether it hurt him, he answered, "Nothing is hurting me; I can just feel his finger touching me." And so during the whole operation he repeatedly said he felt no pain and was totally oblivious of what was being done to him. During the operation ten double or twenty single ligatures were used in tying off the hemorrhoids, and the margins and floor of the ulcer in the rectum were lightly touched with silver nitrate. I was in no hurry to complete the operation, as the anesthesia was so profound, and therefore took an hour and three-quarters in its performance, during which time the patient was very talkative, and also smoking a cigar given him by one of the doctors. His temperature never varied from normal and his pulse kept up a uniform rate of 68 during the operation, and for five or six hours afterward, and at no time during or after the operation did he complain of any nausea or epigastric pain. The operation lasted an hour and three-quarters and there was no sensibility to pain in the rectum or flinching from a pin-stick in the skin of the abdomen or lower extremities for three and a quarter hours longer, thus producing total anesthesia for five hours, and therefore I am forced to conclude that probably 10 or 15 drops of a 2% solution of cocaine would have sufficed. The T bandage and dressing were applied and the site of injection sealed with collodion, and the patient even then expressed a desire to walk across the room to his bed, as he said he felt alright and needed no assistance, but of course this was not permitted. On this October 1st, nine days after the operation, the patient is walking around free from pain.

As an anesthetic for operations on the lower half of the body, the Subarachnoid injection of cocaine in the lumbar region seems to be from reports submitted, eminently successful and free from the dangers of chloroform and ether, and also from the disagreeable after effects. But the precise limitations of this method are yet to be defined. We all know the constant care and watchfulness the anesthetist has to exercise in giving chloroform and ether, but in this method we seem to have something by which the operator can first anesthetize the patient, or perhaps, I should say, first produce inferior hemicorporeal anesthesia and then operate. Now I have always been taught and do believe that cocaine is a dangerous drug, but perhaps all the bad effects of its use may be grouped in two classes: 1. Those persons having a

special idiosyncrasy for cocaine. 2. The accidents caused by abuse of the drug by its overuse, or in too strong solution. And perhaps if this drug was used at all times with proper care as to its dosage, we would have very few complaints against its use as an anesthetic.

Dashing English.

Some writers seem to have the idea that by a prolific use of the dash they can avoid the pitfalls of punctuation, and can escape the labor of making sentences, as well as sense, of what they write. This is well illustrated in a manuscript before us. "What was the direction of the foreign body—what the position of the patient—in what direction was he looking—determine the size of the body by examining the chisel or hammer—see what size piece has been broken off—compare with the wound of the * *—you may have a clean cut wound of the * * quite small in extent. How long a life can be predicted for the editor who is compelled to transfer such stuff into English? Yet, a little more care on the part of writers is all that is necessary. Any man who has clear ideas worth presenting to the world can, with only a little care, make himself perfectly understood by his readers. To do this needs no wide acquaintance with syntax and rhetoric. The plainest and most everyday form of expression is the best, for it is the idea that men seek in scientific literature and not beauty of diction. When you have written a paper, always read it over aloud to yourself. See that each sentence is complete, not too long, and capable of clearly conveying to others your meaning.—*Cleveland Journal of Medicine.*

A Wealthy Pauper Patient.

One of the odd phases of human character brought to light in Bellevue Hospital came to the attention of the authorities on July 6th, in the case of Susan Fallon, 85 years old, who was brought there as a charity patient from her squalid rooms in East Twenty-second street. The old woman was suffering from jaundice, was in rags and tatters, and having not a relative in the world to care whether she lived or died. The neighbors reported her case to the hospital. After she had been placed in a hospital cot, her clothing was searched according to the rules of the institution. Two bank books were found, one on the Seamen's Bank, showing a deposit of \$1.-261.24, the other on the Bowery Bank, and showing a credit of \$921.75.—*Cleveland Medical Gazette.*

THE

Charlotte Medical Journal.**Editorial Department.**

E. C. REGISTER, M. D.

J. C. MONTGOMERY, M. D.

Editors and Publishers.

No. 36 SOUTH TRYON STREET, - - - -

- - - - - CHARLOTTE, N. C.

SUBSCRIPTION. \$2-50 PER YEAR,**J. M. DaCOSTA, M.D., LL.D.**

It does seem the irony of fate that he who was the most brilliant of diagnosticians especially in affections of the thoracic viscera should himself die of heart disease. His ear was the keenest and his touch the most knowing, and yet his heart must suddenly stop in the darkness of the night.

Prof. DaCosta was born on the Island of St. Thomas, in the West Indies, in 1833, graduated from the Jefferson Medical College of Philadelphia in 1852, and then spent two years abroad in Paris and Vienna. In 1854 he returned to Philadelphia and began the practice of medicine. Early in his career he showed a marvelous genius in his diagnosis and treatment of diseases of the heart and lungs.

In 1864 he was appointed to the Chair of Clinical Medicine in the Jefferson Medical College, and in 1872 was elected Professor of the Theory and Practice of Medicine, which position he held up to the time of his death. Much of the fame of this great school was wrapped up in his life-work. Parvin, Keen, Bartholow, DaCosta—there were giants in those days. For several years he has been Emeritus Professor, only holding an occasional clinic, the pressure of his large consultation practice preventing him from taking an active part in teaching. To the profession at large he was a born teacher, clear, reliable, pleasing. To the many thousand students who sat at his feet he was a marvelous instructor, his lectures were charming, his clinics wonderful, and the most truant students never jumped DaCosta.

A great man has fallen in a great work, but the work goes on.

In the place of Bartholow, Hare; instead of Parvin, Davis; in the chair of DaCosta, Wilson.

DaCosta's Diagnosis is known wherever

modern medicine is taught and practised, and will be known until a new era comes in our art and science, and even then it will be treasured as a stepping stone to the higher plane.

How great it is, to live a noble, useful life! And if the end comes slow or quick, the work remains.

THE WEATHER.

This never failing topic of ordinary conversation is now delightful and the heart is full of new resolve. The sweltering days of summer are past, the steamy nights and the musical mosquito are things of the past. The water from the faucet is cool and refreshing, we now enjoy our breakfast, ham and eggs or beefsteak have a flavor and a relish, the morning breeze is brazing, the night is rest and forgetfulness and life is worth living again. What a blessing variety is, how enjoyable the frosty air after the stifling heat. Nature is preparing to go into winter quarters but man is arranging to work on double time and enjoy it. The beginning of the year should come with October for it is a time of resolutions, of plans and schemes, of new endeavors, and purposes. The average doctor now has on top of his ordinary work, the arduous labor of collecting accounts. Money is plentiful in the country and if bills run over now they are as milk spilt upon the ground. No matter then how busy you are in the ordinary affairs of life take time to dun a man for your bill. Watch the cotton crop and the man who owes you; be as concerned about your money as he was about his sick folks, for it is your duty and your right as it was his. Even if you have collected a good bill to-day don't neglect the morrow but get all you can. The work has been well and faithfully done and you have a right to demand a recompense for your time and trouble and worry. Catch the spirit of enterprise and activity from the business men around you and see that the material part of your business does not suffer loss.

When the frost is on the pumpkin then be up and humping.

THE INTERNATIONAL MEDICAL CONGRESS

The Thirteenth International Medical Congress which met in Paris is a thing of the past. The meeting was a success in every way; the attendance was the largest in the history of the Congress, and the interest was well maintained throughout the session, which lasted a week. The entertainments and receptions were on a grand scale, but not so frequent as to interfere

with the scientific part of the program.

Of the more than six thousand physicians who attended, 420 were Americans, a very respectable representation. Dr. Jacobi made a great address before the second general session, but managed to say a few things which have brought out some criticism. In speaking of medical journalism he said that medical journals were published to make money, and that the publishers took most any kind of advertisement so long as it paid, and the editor was completely at the mercy of the publishers and must do their bidding regardless of his own opinion.

The Medical Record takes occasion to say that this is a slander upon the good name of many of the American journals. It does seem that Dr. Jacobi could have found a better subject, one more suited to his genius. As a teacher of scientific medicine he stands an acknowledged authority, but he is mistaken when he judges all the medical journals of this country by the trickery of a few.

More than 1200 papers were presented in the different sections of this great meeting.

In the Surgical Section many important subjects were brought up and discussed. The surgeon of to-day has put forth his hand to treat the pancreas, the spleen, the liver and the spinal cord. The surgeon now includes in his list of diseases amenable to surgical treatment, every organ of the body except the medulla.

The next session of the Congress will be held at Madrid in 1903.

HUNTER HOLMES MCGUIRE, M.D., LL.D.

Hunter McGuire is dead and the cause of surgery has suffered loss. Dr. McGuire was born at Winchester, Va., in 1835, and was educated at Winchester Academy. He studied medicine at the Medical College of Virginia, the Medical Schools of Philadelphia and New Orleans, and Winchester Medical College.

Graduating in 1855 he first practiced in Winchester, holding the Chair of Anatomy in the Winchester Medical College from 1856 to 1859.

During the excitement just before the outbreak of the civil war he led 300 medical students to Richmond from the schools in Philadelphia.

During the war, though a young man, he served as surgeon with credit and distinction. He attended the famous Jackson when he was mortally wounded, and was medical director of the Second Corps, Army of Northern Virginia, from 1862 to 1865. At the close of the war he settled

in Richmond and was elected Professor of Surgery in the Virginia Medical College, which position he held until the organization of the University College of Medicine, when he was made President and Professor of Surgery in the latter school. His surgical practice was immense and he organized St. Luke's Home for the special care of his out of town patients.

Dr. McGuire stood high in the estimation of his fellow workers and was President of the Association of Confederate Medical Officers in 1869, of the Virginia Medical Society in 1873, Vice-President of the International Medical Congress in 1876, and of the American Medical Association in 1881.

In 1887 he was elected President of the American Surgical Association, and in 1892 the crowning honor was given him as President of the American Medical Association.

He was a gifted writer on medical subjects and made a number of valuable contributions to the knowledge of gun-shot wounds, tumors and ligation of arteries.

As an operator he was bold and skillful, and as an attendant he was kind and sympathetic.

Some months ago he had a paralytic stroke and the end came quietly. His death will leave a vacant place in the profession, and a multitude of patients will lament the cessation of his work.

QUALITY NOT QUANTITY.

A little knowledge is a dangerous thing, but a little that is thorough is much less dangerous than a great many surface facts. This is very true in regard to drugs; we know a thousand, but the man of fifty drugs is more intelligent in their use. To know all about even ten drugs is better than to know only the dose of 500.

But there is nothing much to know about drugs; two things mainly, the physiological action and the dose, and why can not we learn these about a multitude of drugs? Mainly because these two things to be learned include a vast number of other things. Drugs have different effects in different circumstances. Certain cases will present certain peculiarities as to the action of certain remedies, and these things can only be learned by close observation and long experience. To test a drug we must use it not once or twice in similar conditions but a number of times in a variety of cases. Some have no faith in digitalis because they have used it once or twice when fever was present and no good effect could be detected. Other drugs are used in doses too large or

too small for the particular case, so that dosage presents as many phases as does disease conditions or indications. One man uses aconite in full doses and is disappointed; another uses the same drug in the same condition, but in small doses frequently repeated, and he is delighted with the result. Salicylate of soda in five grain doses every four hours may produce no change in the patient's condition, while twenty grains every two hours will bring prompt relief. And so by varying the dose we may adopt one remedy to a dozen ailments with the most gratifying effect.

The several ways of exhibiting drugs may also affect their action. A medicine given by the mouth may be to no purpose, but given hypodermically the result is prompt and beneficial.

We have then at least three strings to play on in the treatment of disease by drugs and each one of these strings is capable of producing a number of different notes accordingly as it is fingered. We have heard of performers making sweet melody on one string alone, and the skillful practitioner in his manipulation of the three will make the music of health and strength. These three are: the drug; the dose; the method of administration. Indications must be closely studied to determine the fitness of either.

We count a patient's pulse, apparently he needs active stimulation, but on closer examination we find a sedative to be the proper drug. Be careful in reading your indications, know your drugs thoroughly and then go ahead without faltering. The Arabs, perhaps, have a proverb, "Beware of the man of one book." There is safety in the man with few drugs, thoroughly mastered, carefully worked out.

THERAPEUTICS OF PETROLEUM.

We are all familiar with the good effect of petroleum when applied locally to the external skin in cases of slight abrasions, but perhaps not all are so well acquainted with its equally good effect when it is used for the mucous membrane, which after all is but the internal skin. Whether externally or internally its soothing, healing action on a smarting sore is rapid and permanent. In so many cases of consumption we find a hacking, irritating cough that keeps the lungs sore and the patient worn out from the constant exertion.

Oftentimes this kind of cough is caused by a slight ulceration in the throat, and the administration of this oil heals up the sore, stops the irritation, the cough ceases and

the patient starts on the up grade to health and strength.

But petroleum is not only good for the lungs and throat. It is also useful in disordered conditions of the alimentary canal. In saying Petroleum we have in mind Angier's Petroleum Emulsion with Hypophosphites, the preparation with which we are familiar, and which is probably the best known and most extensively prescribed preparation of Petroleum. In the first place, Angier's Petroleum Emulsion is at once pleasant and palatable, and it can be given in cases where other drugs of the same kind would not be admissible.

Mr. Angier, who is a practical chemist, has spent many years in working out the petroleum question, how best to secure its wonderful curative properties. How well he has answered this question is shown by the enormous amount of Angier's Petroleum Emulsion in daily use by the profession throughout the country.

Even those who have some scruples against using a proprietary remedy are now using it in large amounts and with the very best results. The physicians of the country are beginning to realize that there is such a thing as being too exclusive to the harm of the patient. The pharmaceutical houses have been of great help to the busy doctor in furnishing him improved and efficient weapons in his fight against disease. One of the most notable examples of this helpfulness is found in the history of Angier's Petroleum Emulsion.

But we were saying something about its use in bowel troubles. It is customary nowadays to describe the germ as a prelude to the description of any disease and much of the trouble and distress of bowel inflammation is said to be due to fermentation. Now petroleum is a decided antiseptic both chemically and mechanically. A bacilli entangled in a globule of petroleum is as good as dead, for he is shut off on all sides from nourishment and is soon swept out with other excrementitious matters. A recent French writer, as quoted in the Medical Standard, says that catarrhal troubles of the bowels are made much worse by the administration of any of the irritant antiseptics, and that nitrate of silver should never be given. He advocates high enemas of some bland oil as at once distinctly curative and comfortable to the patient. In such cases the ideal treatment would be with Angier's Petroleum Emulsion as supplying not only a bland oil, but a non-irritating antiseptic oil. We have thought for some time that it was unwise to give strong antiseptics in inflammation of a delicate membrane like the intestinal mu-

cosa, and an agent like petroleum, which is antiseptic without being in the least degree irritating, is a welcome addition to our list of remedies.

In a paper presented to the Medical Society of the State of North Carolina at its last meeting, Dr. Gladmon called attention to the good effect of soothing medication in certain coughs, and that in the majority of cases this medication was all that was necessary to effect a cure. In these hacking coughs that worry the life out of the patient, petroleum is clearly indicated.

Petroleum in addition has decided restorative properties which greatly enhance its value, as in these cases in which it is indicated there is usually an associated condition of malnutrition. In Angier's Petroleum Emulsion there are the hypophosphites of lime and soda which occupy a permanent place in our list of reconstructives. In convalescence from wasting diseases of any kind this remedy can be used with satisfaction. La grippe, bronchitis, pleurisy, and many other affections in weak and debilitated persons are often the determining cause of phthisis. We should look carefully after the convalescence and see that the patient is making satisfactory progress, and in most cases we will find Angier's Petroleum Emulsion an indispensable adjuvant.

QUACK ADVERTISEMENTS AND THE DAILY PRESS.

As a moulder of public opinion, the daily newspaper is powerful and effective. Most people have opinions and ideas about things but these opinions are in the liquid state or at least soft and easily fashioned into any shape.

The secular press gives form to the idea of the people. This great power is abused in regard to physical ailments, and the daily paper is one with the quack and charlatan. The most blatant mouthed impostor in the land can secure the top of the column next to reading matter if he has the price, no questions about the character of the advertisement.

In all the land there is one editor who has a conscience which rings true as steel. Herbert is his name, long may he live, and Kansas is his home. The Journal of the American Medical Association has the following concerning his stand on the quack medicine business:

Mr. Ewing Herbert publishes the Brown County World at Hiawatha, Kansas, a paper that deserves commendatory mention in every respectable medical journal. Without going into any prior advertising of his

course or making, so far as we know, any special religious pretenses, he publishes in a recent issue the following editorial announcement:

"We have at last done what we have wanted to do for many years—thrown out of this paper every advertisement that can be by any chance considered objectionable in any degree. And hereafter we shall print no offensive advertisements. . . . If persons are ailing they should not hesitate to consult a reputable physician. No medicine acts the same way on different persons. What benefits some harms others. From this time on we will not print advertisements of traveling quack doctors. We want clean advertising matter, or none. . . . Last year our patent medicine 'ads.' amounted to \$800. With one dash we have practically swept aside this source of income. We believe that the people who have glanced at Lydia Redham's offensive propositions, and at Slow's Specific, Bradshaw's Regulator, et. al., including the bids of various quack doctors to cure weak and suffering men and women, will miss them in this paper with not a little pleasure. If you are ailing see a home physician, some good doctor you can confide in. It does not make any difference what ails you, do not be afraid to tell an honorable physician about it, and submit to his advice and treatment. Beware of quack doctors; they want your money and they will get it. And they can not cure you. If your home physician can not cure you, he will probably tell you of some eminent man in the medical profession who can help you; but he should warn you in a conscientious and disinterested way never to permit a quack doctor to treat you. Young folks should talk freely to their parents when ill. The parents will call a physician, if one is needed. Do not read filthy 'ads.' Do not buy quack medicines. Do not have anything to do with strange doctors. They are generally disreputable, and entirely unable to do any more for you than to mercifully take your money."

This, a New York paper characterizes as a "step so radical that to read it will cause the hair of every normally constituted publisher to stand erect." We are glad that there are such abnormally constituted ones in the wild and woolly West and trust that time will develop more of them. When the newspaper leaders of public opinion, generally, denounce quackery we will have advanced a long step toward the millennium. At present they mutually defend themselves by each other's example and plead the rule that we should not be suspicious of scruples that do not trouble other good

men. A little more independence of conscience like that of Mr. Herbert would be a good thing if more generally distributed.

This is certainly good news, sound advice based on reason and common sense. The majority of people know that these things are a disgrace to our land, but day after day they are paraded in the public print until the conscience is hardened and the judgment perverted. If only one editor in each State would follow Mr. Herbert's manly course how much would the cause of true medicine be advanced.

THE RISKS OF WAR.

The pen is mightier than the sword, especially the hog-pen if situated near the well of drinking water. The danger of going to war is not so much the steel and bullets of the enemy as it is the insignificant little bacillus.

A germ loves company and where several companies are gathered together there he is in the midst of them, to sicken and to destroy. Disease, working quietly, takes away more men than all the booming forts.

The Scientific American, in speaking of this subject, says that England's losses are large compared with very recent wars, because there has been no great struggle between two civilized nations since the Franco-German war, and in fighting with half civilized peoples the percentages of loss have invariably been all one way—in favor of the modern equipped armies. Even in our short war with Spain, which was not a stubbornly-contested conflict, the importance of modern military tactics and scientific inventions could not be fairly estimated. The equipment of the English army with all modern destructive agencies to meet a stubborn foe almost equally well provided with powerful weapons will furnish sufficient data for some very interesting military literature when the battles have all been fought.

The risks of war have never been quite so great as the inventors of the weapons would lead us to believe. The climate in many wars has been a far greater enemy than the bullets and cold steel of the soldiers. Recent statistics show that the number of our soldiers killed in battle in the Philippines in the last four months of the old year was only 361, and the number who died from wounds and accidents 200, while those who died of disease were 762. In the Cuban campaign the deadly work of the climate was even more effective in its results. The large life insurance companies recognize the risks of the climate as equal to those of exposure to the bullets of the ene-

my, and special clauses are attached to many policies which specify that officers sent to Cuba or the Philippine Island must have their policies reconsidered, and an extra fee paid.

An interesting item of fact is gleaned from the Crimean war literature, that is further verified by some of the naval battles of our recent war. The Russian forces fired 45,000,000 rounds of shots and killed 48,000 men, or one soldier to every 910 shots fired. It was estimated that only a few shots in every hundred of our naval guns hit the mark, and this fact was used as an argument in favor of discarding the heavier guns and substituting smaller and rapid firing guns.

Since the Crimean war the rapid firing guns have greatly increased the efficiency of the artillery and infantry, and the number of shots that can be fired in a given time has multiplied several times over. But the number of fatal wounds inflicted by the modern small bullets has decreased. In the Cuban war about 99 out of every 118 American soldiers shot made complete recoveries. The employment of the modern high-power rifles with their small bullets tends to put more soldiers out of the fight temporarily, but actually decreases the mortality. A queer aspect of the investigation was that a majority of the bullets found lodgment, not in the trunk of the body, but in the arms, legs, and head. The proportion in the Spanish-American war was forty in the legs, thirty in the arms, twenty in the body, and ten in the head and neck, out of every hundred bullets that hit a human target.

The percentages of loss in the South African battles have not been very great, as statistics tend to show. In the fierce battles of the Civil War the percentage of loss of either side approached in some instances one-half the total strength of the contending armies. General Hancock's loss at Fredericksburg was estimated at about 50 per cent., General Longstreet's at Gaines Mill at 50 per cent., and in some half a hundred other battles the percentages of loss ranged between 16 and 18 per cent. Few battles in the world's history can show heavier losses or more stubbornly contested conflicts than the leading engagements of the war between the States. Even at famous Balaklava the immortalized Light Brigade lost only 37 per cent., and at Metz the famous Gardeschutzen lost 46 per cent. Even in the loss of officers the English in South Africa have not made new history. In the Franco-German war, the Germans lost at Spichenen, when they had stormed the French positions, 223 officers and 4,871

men. In the Peninsular war, at the siege of Ciudad Rodrigo, the loss in one desperate charge was 1,200 men and 90 officers, and when the British assaulted Badajoz over 60 officers were lost and a large number wounded, out of a total fighting force of 18,000. At San Sebastian the British lost in the final assault on the fortress 1,716 men and officers, the latter numbering over 150. In one battalion at Salamanca 24 officers were killed and wounded, leaving only three officers untouched by the bullets of the enemy after the fight.

SPECIFIC MEDICATION.

The number of specific remedies in the materia medica are few. Quinine in malaria, mercury and the iodides in syphilis, the salicylates in rheumatism, iron in anemia, will about complete the list. Even specific medication is, however, very much influenced by the method of administration, the particular preparation or the dose. Quinine in capsules may, in certain cases of malaria, be useless to abort or prevent the chill, while in solution with hydrochloric acid it will be a powerful agent for good. Mercury in intractable cases of syphilis may be without effect, but given hypodermically or in combination with the iodides, the disease will promptly abate. The salicylates in ordinary doses may exercise no good influence over the course of rheumatism, but in large doses, frequently repeated, the pain, temperature and swelling disappear at once.

While iron is the sovereign remedy in impoverished blood conditions still the administration of the ordinary tincture or pill may be completely negative in its effect.

To secure the good effect of iron in anemias it must be assimilated when it acts as a stimulant and food to the formative organs of the blood. The number of corpuscles are increased and consequently the carrying capacity of the blood is enormously multiplied and a condition of health soon established. The oxygen of the air is plentiful at all times, the albumin of food is in abundance, but if the blood is poor and deficient in corpuscles, these life giving principles of the air and food can not be utilized by the tissues of the body. A dyspeptic with a disordered stomach and irritated bowels can not enjoy himself at a feast no matter how delicate the viands. So the man with deficient carriers in his blood can only starve in the midst of plenty. But if we can restore his blood in some measure to its normal condition then the oxygen and

albumin are at once available and life becomes worth living. And iron is the remedy *par excellence* for this purpose. The pharmaceutical chemist steps in here and by his art makes a preparation peculiarly suited to the diseased condition.

Gude's Pepto-Mangan is an organic preparation of iron and manganese which is at once powerful in its action in building up the vital elements of the blood, and at the same time palatable and easily assimilated. A number of investigators have determined the value of this agent in all wasting diseases.

Stuart McGuire, of Richmond, has shown its great value to the surgeon and by scientific examinations has proved its power to increase the number of red corpuscles.

Lanphear reports three cases in which the number of corpuscles were increased a million and a half in 37 days by the use of Gude's Pepto-Mangan.

Ramdohr reported eleven cases in which they were increased one million in 22 days.

Van Schaick reports nine cases, closely watched during the administration of Gude's Pepto-Mangan, and all showed a marked increase in the number of red corpuscles in from two to four weeks.

Some of these cases had been taking the ordinary tincture of the chloride or Bland's pills but without good effect. So while iron is a specific in anemia much depends upon the preparation and in many cases we will find the inorganic preparations inert and useless. It is best then in all cases to use the organic preparation which has been shown to be prompt and certain in all cases when iron is indicated.

Clinical reports after investigation with this ideal pharmaceutical product (Gude's Pepto-Mangan) have been submitted to the profession by eminent medical men. The M. J. Breitenbach Company, proprietors, have by this method most certainly allowed others to speak regarding the merits of their combination rather than be continually sounding its praises themselves.

We recall a few names who have investigated and placed the stamp of approval upon this scientific compound: Loomis, Gellhorn, Bauduy, Von Ramdohr, Van Schaick, Lewis, Heitzman (Germany), Ascher (Germany), Hoenigshmed, (Austria), Wolfe, Pierson, Von Ruck, Peterson, McGuire, Fasano (Italy), Lanphear, Perekhan, Ripperger, Krauss, Pohl (Austria), Riley, Summa, Gordon, Craig, Bell, Towslee.

Christian Scientists say that as an evidence of the necessary faith, the fee must invariably be paid in advance.

BOOK REVIEWS.

Progressive Medicine. Vol. III. 1900. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, M.D., Professor of Therapeutics and Materia Medica in Jefferson Medical College of Philadelphia. Octavo, handsomely bound in cloth, 408 pages, with 14 engravings. Lea Brothers & Co., Philadelphia and New York. Issued quarterly. Price \$10.00 per year.

Those who have seen the preceding volumes of this most excellent publication will receive the third volume as a matter of course.

The contents of this volume are along practical lines and will strongly appeal to the busy physician as well as the student of medicine. William Ewart, of St. George's Hospital, writes of the Diseases of the Thorax and its viscera, including the heart, lungs and bloodvessels. The treatment of pneumonia is plainly stated and the present status of the serum treatment is indicated. Pulmonary tuberculosis comes in for a proper share of attention.

Henry W. Stelwagon tells us, in his own inimitable way, of the diseases of the skin. In this branch of medicine he stands at the head and speaks with authority. His clear and simple descriptions are easily mastered and his directions for treatment, if carried out, will bring money to any man who has skin troubles to treat.

William G. Spiller, a disciple of Weir Mitchell, writes in a way worthy of his master of diseases of the nervous system.

Richard C. Norris discusses, all that is worth knowing about, the modern practice of obstetrics. This important part of every general practitioner's work is clearly discussed in a most helpful way and the obstetrician should avail himself of it.

A handy index closes the volume.

A Treatise on Mental Diseases Based upon the Lecture Course at the Johns Hopkins University, 1899, and Designed for the use of Practitioners and Students of Medicine, by Henry J. Berkley, M.D., Clinical Professor of Psychiatry the Johns Hopkins University, Chief Visiting Physician to the City Insane Asylum, Baltimore, with Frontispiece, Lithographic Plates and Illustrations in the Text. Cloth. 600 pages. New York. J. Appleton & Co. 1900.

The general practitioner has been in sore need of this book. Crazy people are as much a mystery to the average doctor as they are to the laity.

No attempt has been made by the busy

physician to master this intricate subject simply because there has been no light to follow.

This work will leave them without excuse and these unfortunate people should have the benefit of a careful study of their condition by the working doctors of the country. It is given to them to see the manifestations of degeneracy in their incipency and at this time the proper help is so important as to constitute the crisis of the treatment.

The contents are divided into three parts: First, The Anatomy and Histology of the Central Nervous System; second, General Pathology; third, Clinical Forms of Mental Diseases. In the latter part under special forms of Insanity we have five groups: Idopathic Insanities; Insanities Consecutive to Organic Lesions; Insanities of the Physical Degenerate; States of Arrested Physical Development; The Psychoses of Childhood. And as a sub-group the Intoxication Insanities.

The general practitioner owes it to himself and his patrons that he give this book a place in his study.

The binding and press work are characteristic of the well known firm whose name is carried at the bottom of the title page.

Medical Diseases of Infancy and Childhood. By Dawson Williams, M.D., Physician to the East London Hospital for Children. New (2d) edition. Specially revised for America by F. S. Churchill, A.B., M.D., Instructor in Diseases of Children, Rush Medical College. In one 8vo. volume of 538 pages, with 52 illustrations and two colored plates. Cloth, \$3.50, net. Lea Brothers & Co., Publishers, Philadelphia and New York.

The first English edition of this work was recognized at once as being a valuable contribution to our literature on this important subject. The second edition, which has been Americanized by Dr. Churchill, should be even more valuable than the first. An examination of the work shows great care and thoroughness on the part of the writer and editor, and its teachings are at once sound and practical. Numerous prescriptions are scattered throughout the text and then gathered together in an appendix at the end for convenient reference.

This new edition conforms to the U. S. Pharmacopeia and is well adapted to the needs of the student as well as the active practitioner. A number of illustrations have been introduced to explain or simplify the text.

The mechanical finish and get-up of the book are in keeping with the worth and merit of its contents.

A Text-Book upon the Pathogenic Bacteria for Students of Medicine and Physicians. By Joseph McFarland, M.D., Professor of Pathology in the Medico-Chirurgical College, Philadelphia; Pathologist to the Medico-Chirurgical Hospital, Philadelphia; Fellow of the College of Physicians of Philadelphia, etc. With 142 Illustrations. Third Edition, Revised and Enlarged. Cloth, 620 pages. \$3.25 net. Philadelphia. W. B. Saunders & Co. 1900.

McFarland's Pathogenic Bacteria has come to be a standard work on this subject. Three editions have been issued in a short time and each one is better than the last. The present issue has been considerably re-written and enlarged and brought up to the present status of our knowledge on the disease producing germs. Since we lay the blame of so many disorders of the system upon the shoulders of these little micro-organisms we should endeavor to become more and more acquainted with them personally to know all we can of their habits, temperaments, and characteristics. If the proper study is man, the next best thing is to study the bacteria that try to eat him up. Especially in infectious and contagious diseases, will our treatment be better and more scientific if we are more or less familiar with the producing germ.

Illustrations are used to make clear the text and the mechanical work in general is as good as the best, which is saying a good deal in this day of modern book making.

New Therapeutic Reference Book for Physicians and Students. By William R. Warner. Cloth. 236 pages. 25c. W. R. Warner & Co. Philadelphia, New York, Chicago, London, Rome.

This very handy reference book has been carefully revised and re-written and its value greatly increased. All the diseases are arranged in alphabetical order with an outline of the most approved treatment. A very useful book for the busy doctor.

An American Text-Book of Physiology. Edited by William H. Howell, Ph. D., M.D., Professor of Physiology in the Johns Hopkins University, Baltimore. Second Edition. Revised Cloth. 600 pages. \$3.00 net. Philadelphia. W. B. Saunders & Co. 1900.

This work is by ten of the leading physiologists of this country and presents clearly the advanced position of this branch at the present time.

In the first volume John G. Curtis, of Columbia University, writes of the Circulation, the editor tells us of the Blood, Lymph, Secretion, Digestion and Nutrition,

Movements of the Alimentary Canal, Bladder and Ureter. Graham Lusk, of Yale, discusses the Chemistry of the Animal body. Edward T. Reichert, of the University of Pennsylvania, writes of Respiration and Animal Heat. This work will prove a most satisfactory text-book on this important subject. It is gotten out in first class style, making a handsome volume well arranged for convenient reference.

Surgical Nursing. By Anna M. Fullerton, M. D., Clinical Professor of Gynecology in the Woman's Medical College of Pennsylvania; Obstetrician, Gynecologist, and Surgeon to the Woman's Hospital of Philadelphia. Third Edition, Revised and Enlarged, with 69 Illustrations. Cloth. 294 pages. \$1.00. Philadelphia. P. Blakiston's Son & Co., 1012 Walnut St. 1900.

This book is a compilation of the lectures upon abdominal surgery, gynecology and general surgical conditions and procedures, delivered to the classes in the Training School for Nurses connected with the Woman's Hospital of Philadelphia.

This is an ideal text-book for training schools. Surgical nursing is one of the most important duties of the trained nurse and many of the training schools are content to teach this subject by example, leaving out the precept.

The nurse should be first of all trained in the theory of surgical nursing and the practical application will come very easily.

In this book will be found the most approved methods of procedure in the preparation of the patient, the operation and the after care of the patient. Every operator who cares to have first class assistance in his work should see that his nurses are careful students of this work.

A Treatise on Diseases of the Nose and Throat. By Ernest L. Shurly, M.D., Vice President and Professor of Laryngology and Clinical Medicine, Detroit College of Medicine; Laryngologist and Chief of Staff Harper's Hospital; Consulting Laryngologist and Chief of Laryngological Clinic of St. Mary's Hospital; Consulting Laryngologist to the Woman's Hospital and Foundlings' Home; Member of the American Laryngological Association; of the American Climatological Association; of the American Medical Association; of the Michigan State Medical Society, Etc. Illustrated. Cloth. 744 pages. New York. D. Appleton & Co. 1900.

This volume, says the author, has been prepared for the perusal of the general practitioner and medical student rather than for the specialist in laryngology. It is therefore his intention to present more par-

ticularly the ideas and facts pertaining to the various subjects from the standpoint of practical experience or observation.

The author has well carried out his intentions, the therapy of the diseases receiving special attention. The chapter and subjects have been arranged according to a classification based upon the general nature of the disease rather than according to the anatomical region involved. Such subjects as belong to the domain of general surgery have been excluded.

The chapters treat of the Anatomy of the Upper Air Passages; Examination of the Upper Air Passages; Acute Rhinitis, Pharyngitis and Laryngitis; Acute Infectious Diseases of the Upper Air Passages; Diphtheria; Fibrinous Rhinitis; Erysipelas of the Upper Air Passages; Diseases of the Nasal Passages, Pharynx and Larynx depending upon the Exanthemata and Essential Fevers; Neuroses of the Upper Air Passages; Chronic Infectious Diseases of the Upper Air Passages; Chronic Diseases of the Upper Air Passages; Local Diseases of the Nose; Diseases of the Accessory Cavities of the Nose, Antrum of Highmore, Frontal and Sphenoidal Sinuses, and Ethmoid Cells; Neoplasms of the Upper Air Passages; Injuries of the Nose; Deformities of the Upper Air Passages; Foreign Bodies in the Upper Air Passages; Operations in the Pharyngeal and Laryngeal Regions and Methods of Local Treatment.

The work contains six beautiful colored plates and more than two hundred illustrations in the text. The mechanical work is first class in every respect.

Bacteriology and Surgical Technique for Nurses.

By Emily M. A. Stoney, Superintendent of Training School for Nurses, St. Anthony's Hospital, Rock Island, Ill; Author of "Practical Point in Nursing," "Practical Materia Medica for Nurses," Etc. Illustrated. Cloth. 190 pages; \$1.25 net. Philadelphia. W. B. Saunders & Co. 1900.

This is a very valuable book for nurses, the subject is clearly outlined and made very simple. The first part of the book is devoted to Bacteriology and Antiseptics, the second to Surgical Technic, Signs of Death and Autopsies.

The modern method of doing clean surgery is clearly explained and the work is thoroughly up-to-date and in full accord with the spirit of the times. As a textbook for nurses it is entitled to rank among the best. The author is well qualified by experience and training to give authoritative teaching on this subject.

Rhinology, Laryngology and Otology and their Significance in General Medicine. By E. P. Friedrich, M.D., Privatdozent at the University of Leipzig, authorized Translation from the German. Edited by H. Holbrook Curtis, M.D. Consulting Surgeon to the New York Nose and Throat Hospital and the Diphtheria and Scarlet Fever Hospitals. Cloth. 348 pages, \$2.00, net. Philadelphia and London. W. B. Saunders & Co. 1900.

This is a book for the general practitioner as well as for the specialist. Most works on special subjects are useful only to one practising in that particular branch, but in this volume the author shows conclusively the mutual dependence of specialism and the general practice of medicine. He points out the interdependence between diseases of the entire organism and diseases of the nose, pharynx, larynx and ears. There are no hairsplit theories and speculations, but exact and well established facts.

The treatment of the subject is succinct, especially the descriptions of the commoner diseases.

The work is divided into twelve parts: Diseases of the Respiratory Organs; of the Circulatory System; of the Digestive System; of the Blood; Chronic Constitutional Diseases; Acute and Infectious Diseases; Diseases of the Kidney; of the Skin and of the Sexual Organs, of the Eye; Intoxications; Nervous Diseases. In an appendix he considers nasal reflex neuroses, the significance of some of the cranial nerves and the relation of diseases of the meninges and of the cerebral sinuses. A well arranged index completes the volume.

A Manual of Syphilis and the Venereal Diseases. By James Nevins Hyde, A.M., M.D., Professor of Skin, Genito-Urinary and Venereal Diseases, Rush Medical College, Chicago; Dermatologist to the Presbyterian, Michael Reese and Augustana Hospitals, of Chicago; Consulting Dermatologist to the Chicago Hospital for Women and Children and to the Chicago Orphan Asylum, and Frank Hugh Montgomery, M.D., Associate Professor of Skin, Genito-Urinary and Venereal Diseases, Rush Medical College, Chicago; Professor of Skin and Venereal Diseases, Chicago Chemical School; Dermatologist to St. Elizabeth's Hospital, Chicago. Second Edition, Revised and Enlarged, with 58 Illustrations in the text and 19 full page Lithographic plates. Cloth. 594 pages, \$4.00, net. Philadelphia. W. B. Saunders & Co. 1900.

In this edition of this well known work every page has received careful attention, the chapter on Gonorrhea being practically rewritten and much new material has been

added throughout the book. Several new cuts have been introduced and a number of lithographic plates added from the atlas of Mracek.

The contents include Syphilis; Chancre; Disorders not Invariably Venereal; Hypochondriasis; Acute Urethritis; Chronic Urethritis, with its complications; Stricture and Gonorrhea in women. These are considered in detail and the most effective treatment carefully laid down. Chronic cases of urethral disease are scattered throughout the country, going from one doctor to another without getting permanent relief. A careful study of the complications of urethritis and their treatment as given by Hyde and Montgomery will help us to cure these cases in a very satisfactory manner. We cannot all be experts in the treatment of venereal diseases, but we can all do much better work than we are now doing if we will keep up with the advance along this line.

As a guide to the general practitioner, this book will be of great value.

Diet Lists and Sick-Room Dietary Compiled by Jerome B. Thomas, Jr., A.B., M.D. Instructor in Materia Medica, Long Island College Hospital; Assistant Bacteriologist to Hoagland Laboratory. Second Edition. Revised. \$1.25 net. W. B. Saunders, 925 Walnut St., Philadelphia. 1900.

This is a book of detachable diet lists for albuminuria, anemia and debility, constipation, diabetes, diarrhea, dyspepsia, fevers, gout or uric acid diathesis, obesity and tuberculosis. It also contains a sick-room dietary and the whole well arranged for practical use. As we have said before, the ordinary physician pays too little attention to diet in cases of sickness, thinking his business is to give medicine alone. No greater mistake can be made and such helps as this book should be gladly welcomed and used by physicians everywhere.

North Carolina Sketches. Phases of Life where the Galax Grows. By Mary Nelson Carter. Cloth. 314 pages. \$1.00. Chicago. A. C. McClurg & Co. 1900.

The writer gives some very readable sketches of North Carolina in this volume and the "We-uns" are plentifully used to give the local coloring.

Human nature is much the same in North Carolina and in North Dakota. They have a different way of expressing themselves, but the ideas are more or less the same. The distinctive traits of people are almost indefinable, but the author has given us a distinct picture of these folks.

A Text-Book of the Diseases of Women. By Henry J. Garrigues, A.M., M.D. Gynecologist to St. Mark's Hospital in New York City; Gynecologist to the German Dispensary in the City of New York; Consulting Obstetric Surgeon to the New York Maternity Hospital; Consulting Physician to the New York Mothers' Home and Maternity Hospital; Ex-President of the German Medical Society of the City of New York; Fellow of the American Gynecological Society; Fellow of the New York Academy of Medicine; Member of the Society for Medical Progress, of the Eastern Medical Society, of the New York County Medical Society, Etc. With 367 Illustrations, 756 pages. Third Edition. Thoroughly Revised. Cloth. \$4.50, net. Philadelphia. W. B. Saunders & Co. 1900.

This standard text-book on the diseases of women needs no introduction to our readers, it is only necessary to say that it is thoroughly revised and better than ever. Thousands of practitioners throughout the country have followed the sound teachings of Garrigues with uniform success and satisfaction. Others might do so with benefit to themselves and their patients. Written in plain language, clearly illustrated, practical in its treatment, it is indeed an ideal work to go by in the busy round of daily work.

London to Ladysmith via Pretoria. By Winston Spencer Churchill, Author of "The River War," "Savrola," Etc. Crown 8vo. About 500 pages, with Maps and Plans. Price \$1.50. Longmans, Green & Co., 91 and 93 Fifth Avenue, New York, London and Bombay. 1900.

Mr. Churchill is a graphic writer and tells the inside history of the British army in Africa in a very interesting way.

He left Southampton with Gen. Buller and intended to go at once to Ladysmith, but could not make his way through from the Cape and so tried Durban. As fate would have it, he must see Pretoria before he could enter Ladysmith and so the farthest way around became the shortest way across. The incidents of his capture and escape are exceedingly well told. He gives some interesting accounts of Buller's unsuccessful attempts to buck the Boer lines at the Tugela and he shows many of the reasons why these attempts were unsuccessful. That terrible night and more terrible day on Spion Kop make one's blood run cold and hot by turns.

To those interested in the South African war, and all are more or less, this book is more fascinating than any novel.

The Story of the Sun, Moon and Stars. By Agnes Giberne, Author of "The Starry Skies," Etc, with copious additions. Fully Illustrated. Illuminated Cloth. 416 pages. \$1.50. National Book Company, Publishers, 437-441 Race St., Cincinnati, Ohio.

There are many things about Astronomy we do not understand, some we may never comprehend in this life, but there are many things we can know if we will.

This work of Miss Giberne tells the elementary facts of this great subject in a simple and interesting manner. It contains all that the ordinary man claiming intelligence should know and a careful reading of it will elevate the mind and broaden the reason. So many people look without seeing and need to have their eyes opened to the beauties of the universe.

This book throws a flood of light upon an interesting and proper study. Knowledge of great things make great men and such knowledge as this will give dignity to the human character. The truths in this work should be a part of every man's knowledge and a copy of the book should be in every home.

Empress Octavia. A Romance of the Court of Nero. By Wilhelm Walloth. Translated by Mary J. Safford. 12mo. \$1.50. Boston, Little, Brown & Co. 1900.

This interesting story carries us back to the bloody times of the tyrant Nero. Metellus, a young Greek sculptor, is caught in the meshes of the imperial web and his adventures are told in a most natural manner.

The character of the Empress Octavia stands out in marked contrast with the shame and vice of the period. The story opens with a show in the circus maximus in which men, women and even children fight with the half-starved wild beasts of the forest and there is blood in abundance throughout the work.

A stirring tale of a stirring time.

That Kentucky Campaign; or The Law, The Ballot and The People in the Goebel-Taylor Contest. Illustrated. Large 8vo. 360 pages. 100 illustrations. Cloth, extra. Price, \$1.75. The Robert Clarke Company, 31 and 35 East Fourth St., Cincinnati, Ohio.

This is a very graphic account of one of the greatest political fights of the country. The book gives a clear and concise record of the political events from the passage of the famous Goebel Election Law in 1898 to the decision of the U. S. Supreme Court May, 1900.

The work is without political bias and gives both sides of this great struggle.

The 100 illustrations include many portraits in half tone, copies of photographs of street scenes during the campaign, and of the various public buildings involved, and etchings of many of the satirical newspaper cartoons.

Transactions of the American Surgical Association. Volume 18. Edited by DeForest Williard, M.D., Ph.D. Recorder of the Association. Printed for the Association, by William J. Dornan. Philadelphia. 1900.

This is by far the most attractive volume of transactions we have seen this year. Handsomely bound in cloth, gilt edge, flexible sewing, uncut edges, printed in first-class style on good paper, it makes an elegant volume of 470 pages. The contents are worthy of such excellent treatment, including papers by Mayo, Dennis, Keen, Deaver, Richardson, Williard, Allis, Warren and others of international reputation in surgery.

The report of the committee on the Medical-Legal relation of the X-Rays presented by the Chairman, J. William White, gives the present status of this interesting question.

A number of fine plates and illustrations are scattered throughout the work. Roswell Park is the President-elect and the Association deserves a vote of thanks from the profession for its great work in the interest of surgery. Dornan, the printer, should also be included in the vote.

Transactions of the Ohio State Medical Society. Fifty-fourth Annual Meeting held at Springfield, May 10, 11, 12, 1899. Press of J. B. Savage, Cleveland.

This volume contains 29 papers and three addresses. The address in medicine was made by Prof. Shoemaker, of Philadelphia, and the address in Surgery by P. S. Conner, Cincinnati.

Several illustrations are found in the text and as a frontispiece there is an excellent cut of Dr. Coleman, the President of the Society. Dr. Foshay, the editor, has done his work well and the book is a credit to the society. The lateness of its appearance detracts somewhat from the interest, but many of the papers are worth preserving in any library.

Transactions of the Louisiana State Medical Society. Twenty-first Annual Session held at New Orleans April 19, 20 and 21, 1900.

The Louisiana State Medical Society seems to be in a prosperous condition to judge from the Transactions of the Twenty-first meeting. This volume contains a number of well written papers by F. W.

Parham, Matas, Dyer and others. The binders, however, put up a job on the publication committee and the work is wretchedly put together.

The financial condition of the society is in good shape and its management well conducted. Dr. F. W. Parham is the President-elect and Dr. A. G. Friedrichs corresponding secretary.

The New Orleans Medical and Surgical Journal was made the official organ of the society.

Transactions of the Ohio State Medical Society.

Fifty-fifth Annual Meeting held at Columbus May 9, 10, 11, 1900. Edited by P. Maxwell Foshay. M.D., J. B. Savage Print, Cleveland.

The publication committee were a little late in 1899, but they come out on schedule time for 1900. The volume is uniform with the previous issues, of convenient size and well printed and bound. The address in surgery by Nicholas Senn is a valuable contribution to our knowledge of compound fractures. Other papers of value by Baldwin, Allen, Martin, Gilliam are well worth reading. Some thirty odd papers are to be found in the volume.

LITERARY NOTES.

Of the fourteen articles which constitute the October offering of The Forum no less than eleven may be classed under the head of timely. In a ringing article Senator J. P. Dolliver discusses what are "The Paramount Issues of the Campaign" from a Republican point of view. Two views of the Cuban question are given, one being "A Plea for the Annexation of Cuba," by A Cuban, whose name cannot be disclosed, and the other a forcible exposition of the reasons "Why Cuba Should be Independent." The Hon. Charles Denby considers "The Future of China and of the Missionaries" in a tone that will find thousands of sympathizers even among those who decide such questions by the test of political expediency. "The 'Negro Problem in the South' is taken up by Representative O. W. Underwood, of Alabama, in an article that may be considered a reply to Gen. C. H. Grosvenor's late plea against the disfranchisement of the ignorant negro voter. In an article full of information Marion Wilcox analyses the substance of "Our Agreement with the Sultan of Sulu," and Victor S. Clark, late President of the Insular Board of Education in Puerto Rico, tells of the strides education is making under American auspices on that island. "The

British General Election" is treated by no less an authority than Henry W. Lucy, the well-known "Toby, M. P.," of London Punch. There is not an article in the issue which does not maintain the standard of interest and usefulness set by The Forum.

"What can Mr. Bryan do if elected President?" This is the question that serious-minded voters in both the great parties, and men of no party, are now asking. It is not, "What does he promise to do?" nor "What ought he to do?" but "What can he actually accomplish, under the Constitution and the laws, in furtherance of the avowed principles of government on which he bases his appeal for votes?" In answer to this question several able writers, representing various schools of thought and party affiliations, contribute pointed and well-considered articles to the October number of The Review of Reviews. Mr. Edward M. Shepard, who is distinctly sympathetic with Mr. Bryan on the issue of "imperialism," outlines "The Practical Bryan Policy for the Philippines" in a paper which will attract the more attention because its positions are almost the reverse of those taken by the Review editorially in its September number; but in this campaign, as in that of 1896, the Review opens its pages to both sides. Mr. Frank S. Monnett, who, as attorney-general of Ohio, won distinction for his effective enforcement of the anti-trust laws, tells how the trust problem could be practically dealt with by a Bryan administration; while a more conservative view of the same subject is presented by Prof. J. Laurence Laughlin, of the University of Chicago. A Republican and a Democratic view of the prospects of silver under a President Bryan are presented, respectively, by Director of the Mint Roberts and by Dr. Chas. B. Spahr.

Comrades True, by Annie Thomas (Mrs. Pender Cudlip), author of "The Siren's Web," etc., The Century Series, No. 16. Paper. 354 Pages, 50c., New York, F. M. Buckles & Co., 9 and 11 East 16th St.

The Plain Miss Coray, by Florence Warden, author of "The House on the Marsh," etc., The Century Series, No. 17. Paper, 328 Pages, 50c. New York: F. M. Buckles & Co., 9 and 11 East Sixteenth St.

Dr. L. F. Barker, from the Johns Hopkins University, has assumed his duties as Director of the Department of Anatomy at the Chicago University and at Rush Medical College.

ABSTRACTS of the One Hundred Leading Articles of the Month.

Abdominal Section.

L. Grant Baldwin, in the Brooklyn Medical Journal for September, gives some very practical points in the management of abdominal cases.

In regard to the preparation of the site he has discarded the prolonged and severe preparation as recommended in the textbooks, but the parts are well cleaned before the patient is brought in.

He prefers an incision to the right or left of the median line and closing he likes the through and through suture of silkworm gut.

He uses only one piece of gauze in the cavity at one time, and in that way no danger of sewing up a sponge in the cavity is secured. One piece of gauze is sufficient to keep the intestines protected at the working spot. Flushing the cavity is a poor way to clean it out; the better way is to use a funnel and piece of rubber tubing, the tube is introduced to the bottom before the water is poured in the funnel and we have a current upward instead of downward as when the water is simply poured in.

Before removal from the table every patient is given an enema of one quart of saline solution, one ounce of whiskey and ten to fifteen minims of Squibb's compound solution of opium.

The bowels should be moved early. Two ounces of Epsom salts just before the anesthetic is a good plan. Twelve hours after the operation ten to fifteen grains of calomel are given in a capsule; this is better than small doses frequently repeated.

Anesthesia.

H. D. Averill, in the Journal of Medicine and Science for September, gives some very positive advice on the subject of anesthesia. He says—

Don't bring complicated machinery that the Devil couldn't understand. A simple towel and piece of paper is enough.

Don't be twenty or thirty minutes in getting anesthesia. Three or four minutes serves the interest of the patient better and saves the nerves of the operator.

Don't use a pound of ether and have the patient a long time recovering from its effect. Two or three ounces is sufficient for complete anesthesia.

Don't when the patient is under ether be so prodigal in its use as to keep the patient breathing like a person in a fit, but just touch him off a bit at each prolonged res-

piration and thus avoid unpleasant after effects.

Don't suspend anesthesia until the operation is finished and dressings applied, unless for very good reasons. This distresses the operator much, if not the patient.

Don't raise a hue and cry about the pulse unless it really is feeble. It prolongs anesthesia and rattles the operator.

Don't turn ether in the patient's eyes. If he doesn't make any complaint at the time, he certainly will in the next few days.

Don't let the patient's face be kept wet with chloroform, or else if he has a delicate skin he will be temporarily much disfigured.

Don't let some officious person "hold a light" too near the ether. Such should be excluded from the operating room and regarded with some suspicion ever after.

Apparent Death in the New Born.

In the St. Louis Medical Review for September 8th, B.S. Schultze gives the following plan of treatment in asphyxia of the new-born:

If the child is reddish-blue and there still exists some tension in the muscles, leave it in communication with the umbilical cord as long as the heart-beat is perceptible. Remove the mucus from the mouth and excite the skin reflexes. If it does not react immediately cut the umbilical cord, plunge quickly and for a very short time into very cold water, then into warm water. Repeat these immersions until the child cries loudly.

If the body of the child has the pallor and flaccidity of a cadaver immediately after death, do not expect to obtain anything by excitation of the reflexes, for precious time will be lost. Cut the cord at once, remove the mucus from the mouth and pharynx, pull out and press down the base of the tongue to elevate the epiglottis and then do artificial respiration, either by Sylvester's method or by my method of swinging the child. Commence with a long expiration. There is no better means of cleaning the aspired mucus from the large and small bronchi. After having changed the position from expiration to inspiration eight or ten times a minute, plunge the infant into a warm bath and watch it. You will see that heart-beat become stronger and more frequent, the skin reddens and the muscular tension returns. If in a short time you have not succeeded, begin again to swing the child after the bath. The expiratory movement ordinarily causes the first inspiration spontaneously. If, however, the respiration remains super-

ficial, plunge the child into ice water. It will react at once, bend the thighs strongly and cry aloud; the medulla now responds to reflex irritation. Never consider a child, born in a state of asphyxia, as completely resuscitated until it cries continuously and loudly.

Abdominal Tumors.

In writing of the analytical diagnosis of abdominal tumors, in the Milwaukee Medical Journal for August, Byron Robinson says that the size of the tumor is of little value.

More important points are the shape, the consistence, the location, the mobility, the origin, and the contour. He develops each of these points and closes by saying that the genital tumors met with in practice are those of the uterus, oviducts ovary, and para-ovarian, the hæmatoma and hæmatocèle. Those of the parametrium, extra and intra-peritoneal exudates and ligamentum latum. The differential diagnosis of the genital, gynecologic or pelvic tumors is a difficult subject and presents to the specialist many unsolved problems. The rock and base of the diagnosis of gynecologic tumors is the objective examination by means of bimanual vaginal palpation. The groundwork consists in first finding the organ from which the tumor springs, after which the nature of the tumor is easy to proclaim. The analytic diagnosis of abdominal tumors solves itself into a problem of topographic anatomy.

Actinomycosis.

Several cases of actinomycosis are reported by C. A. Porter in the Boston Medical and Surgical Journal for September 13th,

In speaking of the treatment of the maxillary form he says that though it cannot be a rare affection, few cases enter the hospital with advanced actinomycosis of the jaw, and it seems therefore certain that many recover after simple incision of the abscess, and even through a natural rupture of it.

It is surprising to find, on microscope examination of sections, how infrequently the colonies are found in the walls of the abscesses, though the pus contained many granules. The surrounding connective tissue probably proves an effective barrier to the spread of the disease.

Simple opening, curetting and drainage have proved sufficient in many cases; though recurrences may be frequent, healing eventually takes place. Where possible, excision of the inner half of the

abscess wall or sinus is the best treatment. The danger from swallowing the granules, where the discharge empties into the mouth, is hard to estimate. Certain cases of generalized disease in the lungs, intestinal tract, liver, etc., occur in which the organism gained entrance through the food or was swallowed, and therefore the surgeon should aim at making *external* drainage. This question is often a difficult one to decide. On the one hand, he wishes to avoid a scar on the face, especially in woman; on the other, he wishes thoroughly to eradicate the disease: for with recurrence the scars would probably be worse than from a single, thorough and clean operation. The individual case and the severity of the infection must determine the choice between curetting and cauterizing the cavity with tincture of iodine or carbolic acid and a more radical excision. Iodide of potash, in doses of 20 grains three or four times a day, has distinctly influenced some cases for good, and should be used in connection with the local treatment.

Angiotribe in Abdominal Surgery.

Hugh M. Taylor, in the Virginia Medical Semi-Monthly for September 7th, writes very favorably of the use of the angiotribe in abdominal surgery.

His opinion is based upon the use of the instrument in 25 or 30 cases of suprapubic section. About one-half of the cases were very simple in character, the others were ovarian cystomas, disease of the tubes, etc.

He considers the angiotribe a perfectly safe substitute for ligatures and compression forceps.

The precautions for its use are very simple—at right angles to the blood vessels and for three minutes. Post-operative shock is diminished by the use of this instrument and convalescence is established at an earlier date. By the use of this instrument nature's method of arresting hemorrhage is imitated and no foreign substance nor necrotic tissue is left in the wound to act as an irritant.

Anesthetics.

E. E. Levers, in the Western Medical Review for August, gives some praise for chloroform as an anesthetic. The large bellied, little headed men of the country,, who pose as authorities, have poisoned the minds of the doctors against chloroform, and lots of people who have never used it more than two or three times calls it so dangerous.

Dr. Levers has the following conclusions:

In most cases chloroform is to be preferred to ether, as it is more pleasant to the patient, the after effects are less marked, and we believe if statistics were accurate it would be equally as safe as ether.

Where possible the patient should be prepared for the anesthetic.

One of the most important and successful steps in the administration of an anesthetic is to secure full confidence of the patient.

The anesthetist should not be made nervous by the surgeon's suggestions.

Chloroform should be given slowly with plenty of air, by the "drop-by-drop" method.

Amenorrhea.

L. H. Dunning, in the Indiana Medical Journal for September, says that the treatment of amenorrhea due to occlusion of the vaginal outlet by an imperforate hymen is obvious. Incise the hymen, empty the vaginal tube and pack lightly with gauze.

Dilate fistulous tract in case of double vagina with partial occlusion of one, and dilate a stenosed os and introduce a Wylie drainage stem pessary, endeavoring by this means to secure a permanent patulency of the cervical canal.

When the amenorrhea is due to retarded development of the sexual organs, if the patient presents herself early, before 18 or 20 years of age, a reasonable hope may be entertained of establishing the menstrual function as a result of stimulating a growth of the reproductive organs.

Among the most efficient means to accomplish this purpose is the faradic current. The prolonged administration of iron in small doses, or the iron and aloes pills, is not infrequently efficient. The use of the zinc and copper stem pessary, introduced by Simpson, is probably the most efficient mechanical means, especially in cases in which there is antelexion of the uterus. In such cases the uterine canal should be dilated previous to the introduction of the stem pessary. There can be no doubt that while the method is often efficient, it is in some instances attended by danger to the patient. The pessary should be shorter than the uterine canal and of just sufficient size to be readily retained in the canal. If it produces the slightest pain or soreness it should be discarded.

A happy marriage, if the woman is otherwise healthy, not infrequently results in the speedy growth of the sexual system and occasionally in pregnancy. It must be remembered that in this class of patients the menopause is prone to appear early, and

that miscarriage may occur in the first pregnancy, while a subsequent pregnancy may be followed by a perfectly normal gestation and delivery. In young women possessing highly atrophied uteri and ovaries we need not expect to see the menstrual flow appear, no matter what means are adopted. It is better to withhold all efforts in this direction. Occasionally in young women possessing well-developed ovaries and rudimentary organs developed from the ducts of Muller, life is rendered tolerable only by extirpation of the ovaries. This is a procedure the necessity of which is greatly to be deplored.

Appendicitis and Gall Stones.

In a paper before the Mississippi Valley Medical Association at Asheville, A. J. Ochsner calls attention to the relation between appendicitis and gall stones.

The paper points out the frequency with which gall stones and chronic appendicitis exist in the same patient. In order to more clearly define this condition the author has tabulated twenty cases of gall stones upon which he operated during the four months beginning February 1st and ending June 1st of the present year. Six of these cases, or 30 per cent., were suffering from chronic appendicitis; there being adhesions of the appendix to the surrounding parts; fecal concretions in the dilated distal portions of these appendices and, in fact, in all of these appendices every evidence of severe gangrenous or perforative appendicitis at some past time.

The presence of marked appendicitis in so large a proportion of gall stone cases makes it likely that the infection of the gall bladder, which gives rise to the presence of gall stones, is frequently due to infection from appendicitis.

The histories of the cases suffering from both appendicitis and gall stones are given in full.

Chloroform in the Sitting Posture.

D. E. Keefe, in the New England Medical Monthly for September, is not at all afraid to administer chloroform in the sitting posture. Of course the recumbent position is best in most cases, but he has given it in the sitting position in about one thousand cases, mostly in the dentist's chair and concludes that chloroform may be safely given in the sitting posture.

The sitting posture favors the return blood from the brain.

The sitting posture tends to the prevention of cerebral congestion.

The sitting posture aids respirations.

Asthma.

In the Medical Times for September, Thomas Hunt Stucky writes of the treatment of asthma.

The principles of treatment are elimination and sedation. He says that the vast majority of cases are dependent upon disturbances of metabolism or intestinal derangement with fermentative changes and distension of the colon, the cause being mechanical in a large measure. He has relieved acute asthma in a few minutes by the colon douche, large doses of purgatives, nitroglycerine and nitrite of amyl pearls. Give the patient plenty of fresh air even in the coldest weather, as there is no danger of taking cold. The air of a close room is deficient in oxygen and only adds to the distress.

Bone Food.

B. T. Whitmore, in Medicine for September, recommends bone food in certain conditions, and says that there is nothing better than bone itself.

In the course of his article he says that in bone we find the mineral phosphates deposited as an apparent solid. Yet the solidity is only apparent; bone substance is everywhere perforated by the canals of Haver with lacunæ and cancelli, all of which render the bone substance readily permeable by the digestive fluids. On still further analysis we find that the mineral elements of bone are deposited in the most minute form in collagen, which is itself readily digestible and yields nourishment. Bearing these points in mind we make use of the reparative value of the bone by subjecting it to a reduction into a fine powder or flour. It is well understood that no amount of such a purely mechanical process as grinding can reduce a chemically formed substance so fine as to break up its composition. Accordingly, no matter how fine our bone flour may be ground, each particle remains a minute deposit of mineral phosphate in collagen and permeated by the cancelli of its structure, which provide a capillary system for the induction of the digestive solvents to the inner portion of each such particle. In this condition the process of digestion carries into the circulatory system the needed supply of the phosphates in a form suitable for assimilation, and this enriching material is taken up by the tissues wherever there may be need existing for reparation.

Bone flour is prepared from the larger bones of sound beef cattle. The bones are thoroughly cleared of all muscular and ten-

dinous tissue, dried, and ground. The resulting product is a fine powder devoid of taste and odor, and which will keep indefinitely. It is given in admixture with other foods in such proportion as will serve to bring them up to the standard phosphatic supply. To ordinary flour or meal of the common cereals it is recommended in the proportion of from three to five per cent. In general it may be mixed with any food article which is sufficiently glutinous to hold it in general admixture, or it may be taken in suspension in milk or water. It is not intended to take the place of the various hypophosphites as a remedy, but as a dietetic agent it will frequently make the administration of the hypophosphites unnecessary.

Blood Changes in Malaria.

According to J. E. Wilson, in the Virginia Medical Semi-Monthly for August 24th, anemia is the prime factor in malaria, due to the destruction of the red blood cells by the plasmodium malarie. Melanæmia is a secondary consideration, depending upon the liberation of the pigment of the parasite when they segment. The blood becomes hydremic, and, in cases where there is a rapid disintegration of the red cells, we frequently find a hemoglobinemia.

In malarial cachexia, the anemia is frequently very profound; often the blood count gets as low as one or two million per cubic millimeter. The general characteristics are those of a secondary anemia, and we get all the changes common to this disorder.

All of the organs of the body suffer. The heart is one of the first to be affected. It, having been accustomed to resisting blood of the normal specific gravity (1060), soon begins to get irregular, and palpitation is noticed. The lowered specific gravity of the blood causes a different resisting force to be exerted, and we detect it as a hemic murmur, which is best heard over the thyroid axis.

The alimentary tract not receiving its proper nourishment, due to the impoverished condition of the blood, cannot perform its functions and secrete the juices for digestion, and we see the results in indigestion and diarrhœas.

The liver gets cirrhotic and the spleen hypertrophied, due to the poor condition of the blood and the deposit of the pigment of the malarial parasite.

The nervous system is also affected, most commonly as anemic neuralgias.

Cancer of the Breast.

J. S. Stone, in the Boston Medical and Surgical Journal for August 30th, gives his results in the operative treatment of cancer of the breast.

He has operated in 57 cases with no mortality.

Ten were done in 1899, and have not recurred, but as so short a time has elapsed they are not included in the following statistics. Of the remaining 47, 46 have been followed up to the present time. Of these local recurrences took place in 27, or 57½ per cent., a far worse showing than it ought to be, and than will be made by later cases. Of the remaining 20 cases, 8 died from internal cancerous disease; 2 died over three years after operation, 1 of diabetes and 1 of apoplexy—both without recurrence, and 9 are well and free from recurrence after passing the three-year limit. Thus, in 11 out of 47, or 23½ per cent., there has been immunity from the disease for at least three years. One case was operated on in December, 1897; had a small local recurrence which was removed in December, 1898, and at present shows no return.

Chronic Cystitis in the Female.

C. G. Cumston, in the New York Medical Journal for September 22d, describes the treatment of chronic cystitis in the female by curettement of the bladder and instillations of corrosive sublimate.

The bladder should be empty and with one or two fingers in the vagina we secure the necessary resistance for the curette. For the anterior wall the pubes will furnish the point against which we can curette. He begins with a bichloride solution of 1 to 2,000, gradually increased 1 to 1,000, and then 1 to 500.

The strength of the solution is to be progressively increased according to the tolerance of the mucous membrane of the bladder.

As to the amount he recommends 2 to 4 cubic centimeters and from 10 to 15 drops in the neck of the bladder, and the deep portion of the posterior urethra.

He says that sublimate instillations will often produce a very great improvement in the distressing symptoms met with in both tuberculous and non-tuberculous cystitis, such as a diminution in the frequency of micturition, a decrease of the pain, an increase in the capacity of the bladder, and an improvement in the condition of the urine. In some cases a complete cure may be obtained. When the instillations fail to produce the desired effect, curettement of

the bladder is indicated in both tuberculous and non-tuberculous cystitis. In gonorrhœal cystitis instillations of sublimate are particularly efficacious and rapidly subdue the pain. Under favorable circumstances a radical cure of primary tuberculous cystitis may be obtained by curettement when the vesical lesions are localized and the kidneys free from the disease. Curettement per urethram will not allow the surgeon to reach the entire surface of the bladder, so that when the lesions are extensive they should be directly treated by suprapubic cystotomy. Much relief may be afforded by curettement to a large number of patients suffering from tuberculosis of the bladder, but who on account of the advanced stage of generalized infection are in no condition to undergo a more radical operation. When cystitis is due to a prolapsus of the genital organs, and when hysteropexy, combined with anterior and posterior colporrhaphy, does not relieve the bladder symptoms, curettement of the bladder, followed by sublimate instillations, is the proper treatment.

Consumptive Convicts.

W. F. Blake, in the Alabama Medical Journal for September, makes a strong plea in favor of a separate prison for consumptive convicts. He quotes a number of authorities to show the great danger of this disease among persons in confinement. Infection in a most concentrated form is found in the majority of our prisons.

He says that there is only one remedy for this condition, and that is to separate the consumptive convicts from the non-consumptive. We need something more than separate wards in the same building or separate buildings on the same grounds. We need a separate camp for consumptive convicts, the further from the other prisons the better, in order to give the non-tuberculous prisoners the greatest possible immunity from this disease.

With the organization of such a camp, and the exercise of painstaking care in detecting consumption in its early stages, and the prompt removal of such convicts to said camps; in doing this, we shall have accomplished all that our present knowledge of this disease points out as our duty in the premises. This would give the consumptive better treatment, and the well man a chance to remain well. In this matter, the duty of the State is plain. It has the right to deprive the offender of his liberty, but it has not the right to deprive him of his health. Think of the horrible fate of continuous confinement in the same room with a contagious and deadly disease.

Cancer of the Uterus.

R. S. Sutton in a paper before the Mississippi Valley Medical Association at Asheville, on cancer of the uterus and its treatment, said that cancer operations should not be recommended as curative, but as palliative and therefore useful.

Total vaginal extirpation of the uterus at or after time of climacteric, should find a place as prophylactic treatment against cancerous disease.

This paper consisted of a compact review of the anatomy, pathology, diagnosis and present method of treatment.

The author expressed the opinion that treatment for existing cancer of the uterus had probably reached its complete evolution. In view of the ultimate results of this treatment, which he heartily endorses, because there is none other known to take its place, he asks the question, *cui bono*?

He then discusses the question of prophylaxis, he shows that the average age of his patients operated upon was forty-three years and a fraction, and claims that if these patients had all been subjected to total vaginal extirpation, at the average age of forty years, that all of them would have escaped cancer of the uterus. That according to his own statistics but four per cent. of the cases would have died. Whereas nearly one hundred per cent. of the cases did die, within a period of two or three years, after operations for cancer.

He urged greater attention to the early repair of lacerations of the cervix, and a more painstaking observation, and consideration by physicians at large of that train of symptoms preceding and leading up to the development of cancer of the uterus.

He unequivocally recommends radical surgical treatment in all such cases, and clearly announces that if we are to diminish the number of uterine cancer cases, and consequent mortality in the future, it must be done in forestalling the disease.

Chronic Intestinal Obstruction.

A. C. Hamann in the Cleveland Journal of Medicine for September says that the symptoms of chronic intestinal obstruction are pain, constipation, spurious diarrhea, later vomiting, impairment of digestion and emaciation.

In malignant cases sooner or late the cachexia will appear,

The symptoms are more marked if the small bowels are affected.

On physical examination of chronic obstruction the abdomen may be normal in appearance if the small intestine be involved or if the case is seen early. Later

however there is distention owing to the accumulation of feces and gas. Two of the most important symptoms are the rumbling sounds and the visible peristaltic movements. The movements occur in the part of the bowel above the stenosis; the intestine is making an attempt to empty itself and may become hypertrophied in time. These movements may be accompanied by the colicky pains referred to. Palpation of the abdomen is apt to bring them on. The prominence of this symptom depends upon the thickness of the abdominal wall, upon the amount of hypertrophy of the gut, and upon the amount of distention. These visible peristaltic movements do not occur when the obstruction has become complete. Meteorism is a variable symptom; there is usually marked distention in the later stages of the case. By palpation of the abdomen we seek to determine the presence of a neoplasm or of fecal masses; of course the recognition of either of these throws light upon the diagnosis. A thorough rectal examination should be made in every case. In some cases of stricture of the lower part of the colon or of the sigmoid flexure it has been called ballooning of the rectum. It must not be forgotten that acute obstruction may suddenly come on in a case in which for some time there has been more or less evidence of chronic obstruction.

Cocaine as a Substitute for General Anesthesia

John B. Murphy, in the Chicago Clinic for September, reports nine cases in which he used subarachnoid injections of cocaine as a substitute for general anesthesia in operations below the diaphragm.

The operative technique is as follows:

The patient is in the sitting posture, both arms carried forward. The field of injection is thoroughly aseptized. Locate the iliac crests. An imaginary line connecting these two crests passes through the fourth lumbar vertebra. By injecting beneath that line you penetrate the medullary canal. As soon as you have located with the left index finger this spinous process, tell the patient to bend forward so as to make a big bag. This bending forward causes a separation of 1.5 cm. between the vertebra on which you have your index finger and the subjacent vertebra. Then it is always wise to tell the patient, "I am going to stick you with a needle; you will feel some pain, but do not move." Make the injection with the right hand. Insert the needle to the right of the vertebral column, about 1 cm. from the line of the spinous process. The needle goes through the skin, through the

subcutaneous cellular tissue, through the lumbar aponeurosis, through the muscles of the sacro-lumbar region, and penetrates into the lamellar space, and at last penetrates into the spinal canal. As soon as the needle is in the subarachnoid space it meets no resistance, and from it escapes a clear, yellow fluid. This fluid is the cerebro-spinal fluid, and escapes drop by drop. The surgeon must never inject a solution of cocain before he has seen the cerebro-spinal fluid escape through the needle. After he has seen this fluid escape through the needle, he attaches to the needle a syringe containing 1 c.c. of a 2 per cent. solution of cocain. The injection is made slowly; it should be completed in one minute. The dose injected should not exceed 15 milligrams of cocain. The injection terminated, rapidly remove the needle and close the needle puncture with sterilized collodion. Note the precise minute at which the injection is terminated, and then wait. The patient can be questioned as to the subjective sensation which he experiences. After a certain lapse of time, according to the subjects, from about four to eight or ten minutes, the patient would complain of a tingling sensation and numbness of the feet. This numbness extends to the legs. You can now begin the operation.

Of the cases reported there was pyosalpinx, varicose veins, ulcerated stump, ovarian tumor, appendicitis, traumatic synovitis, suppurative epididymitis, varicose ulcer, strangulated hernia, and in all the patients suffered no pain or inconvenience.

Care of the Bowels in Abdominal Section.

Hunter Robb in the Richmond Journal of Practice for August emphasizes the importance of careful attention to the bowels before and after an abdominal section. The bowels are freely opened before the operation with calomel, citrate of magnesium or castor oil and enemas.

He says that after an abdominal section, as a rule, the bowels are opened on the next day, but sometimes on the second or third day following the operation. We generally accomplish this by giving the patient two grains of calomel by the mouth, the morning after the operation. If this should be vomited, the calomel is repeated at once. At 2 P. M. the patient receives an enema consisting of half an ounce of turpentine and two ounces of olive oil in a pint and a half of soap-suds. If this is not effectual, we then employ, at 5 P. M., a high enema consisting of two ounces of glycerine, followed by a pint of warm water two hours later. If the bowels have

not been moved by 7 P. M., we give a drachm of the sulphate of magnesium every hour for three doses. If the bowels have not responded to this treatment by 10 P. M., we order another enema of the turpentine, olive oil and soap-suds. Only in very exceptional cases is it necessary to carry out the whole of this routine. In those cases, however, in which despite all these measures no satisfactory results have been obtained, we desist from carrying out any further procedures until the next morning, when a seidlitz powder is administered; or possibly under these circumstances we order one or two enemas of turpentine, sweet oil and soap-suds during the night. Cases which will not respond to this treatment will probably prove to be instances of septic infection and will in all probability terminate fatally. We have carried out the method described above for the past four years, and in a series of 114 consecutive unselected abdominal sections without a death it has proved to be most satisfactory.

Chronic Gastritis.

J. B. Whinery, in the Physician and Surgeon for August in discussing chronic gastritis, says that when the condition is due to an error in diet, as is commonly the case, the first thing to do is to go over the patient's diet list and find out what he eats and what kinds of foods disagree with him. Find out the time and regularity of eating and the quantity of liquids taken. It will probably be best not to cut off too many things, unless at first it is thought necessary to keep the patient on an exclusive milk diet for a short time. Exclude hot breads, pastry, fats, usually potatoes, and always coarse vegetables. Cut down the liquids. Further than this one will have to suit the diet to the patient. If it is desired to give fat in some form, good butter or olive oil in a salad may meet the requirements.

It is often advisable to increase the number of meals to four or five a day, with a small amount of food at each meal. It is better to omit alcohol from the diet altogether. Regarding the use of drugs, gastric stimulants are often of value. Strychnia either by itself or in the form of tincture of nux vomica, gentian, columba, and condurango are representative drugs of this type. The question of giving hydrochloric acid and ferments arises. As there is usually subacidity, dilute hydrochloric acid in doses of fifteen to thirty drops, fifteen and thirty minutes after meals, is often of help. Pepsin is now considered of doubt-

ful value, and should there be an atrophy of the glands a little pepsin is not of much use.

Pancreatin is probably a better ferment. Constipation is often troublesome, and may be relieved by arranging the diet and by giving a mild cathartic, such as cascara or rhubarb. There are many remedies for the fermentation and flatulence. Of course the first thing to do is to correct the diet. The dictum of Ewald, that the best stomachic of all is the stomach tube, has been proven true. Washing the stomach out every day, every other day, or once a week, as the case may require, is a great stimulant to normal glandular activity. Plain warm water, weak solutions of salt, boric acid, or sodium bicarbonate are commonly employed. Cases in which there is a large amount of mucus not affected by the above solutions demand the use of some astringent.

Climate in the Treatment of Tuberculosis.

Francis Crosson, in the Medical Dial for September, writes in glowing terms of the climate of New Mexico in the treatment of consumption.

He says that cases of pulmonary tuberculosis in the early stage of the disease, derive the greatest and most lasting benefit from a residence in that climate—the disease yielding promptly, and the patient becoming, in a short time, as nearly as it is possible for him to be, a sound and well man. In the second stage of the disease, also, pulmonary tuberculosis frequently subsides and remains quiescent for a long period of time, it being not an uncommon incident for a patient to ultimately die of some other disease. Cases of pulmonary tuberculosis in the third stage with serious laryngeal involvement, constant temperature, night sweats, diarrhœa, mixed infection, and profound anorexia, should never be sent from home, with the view of deriving any curative benefit from any climate. If such a patient or his friends insist upon a change, it should be distinctly borne in mind that no climate can help or save him; and that the best he can expect from a change is some relief or modification of the more aggravating symptoms of his disease, or, in other words, to make the act of dying easier for the sufferer. The attention of the medical profession throughout the United States has been attracted to this region with great force in the past few years, owing to the large percentage of recovery produced by the climate. Patients are being sent here in great numbers, and the results are more than fulfilling the expectations, so that the future of New Mexico as the sanitarium of

this country for tuberculosis in all of its forms may be stated as an established fact, and its claim is based upon a firm and lasting foundation.

Comparative Study of Digitalis and its Derivatives.

John P. Arnold and H. C. Wood, Jr., in Merck's Archives for September, contribute an article on digitalis and its derivatives.

They conclude that digitalin and digitoxin each represent the full circulatory powers of digitalis.

Digitalis, digitalin, and digitoxin stimulate the cardio-inhibitory mechanism both centrally and peripherally. In larger doses they paralyze the intrinsic cardio-inhibitory apparatus.

They all cause a rise of blood-pressure by stimulating the heart and constricting the blood vessels.

Very large doses paralyze the heart muscle of the mammal, the organ stopping in diastole.

Digitalin of Merck is a stable compound, one Gm. of it being equivalent to about 70 Cc. (18 dr.) tincture of digitalis.

Digitoxin is not to be recommended for human medication on account of its irritant action, which makes it liable to upset the stomach when given by the mouth or to cause abscesses when given hypodermatically, and on account of its insolubility which renders it slowly absorbed and irregularly eliminated, having a marked tendency to cumulative action.

Dilatation of the Stomach.

Byron Robinson, in the American Practitioner and News for August 15th, reports a case of dilatation of the stomach from pressure on the transverse segment of the duodenum by the superior mesenteric vessels. The patient was a man of 45, in bed five months with hipjoint disease. He had some lardosis and enormous distension of the abdomen with continual vomiting. Section was done and the abdomen was found completely filled with a white shining cyst which proved to be the enormously dilated stomach. Nothing could be done and the patient subsequently died. On autopsy the transverse portion of the duodenum was found compressed by the superior mesenteric artery, vein and nerve, as they cross it to pass behind the stomach.

He brings forward this cause of dilatation of the stomach as something new under the sun.

Digitalis and its Active Principles.

As reported by the St. Louis Medical Review for September 13th, Lauder Brunton, before the International Medical Congress, gave the following summary of the physiologic and therapeutic actions of digitalis and its active principles:

The physiologic action of digitalis is exerted chiefly: (a) on the heart, (b) on the blood vessels, (c) on the secretion of urine.

Its action on the heart is that it: (a) slows the cardiac beats chiefly by stimulation of the roots of the vagus in mammals, (b) increases the force of systole, and (c) increases the extent of expansion in diastole. Both b and c are due to an action on the cardiac muscle.

It contracts the peripheral vessels and thus slows the current of blood through them.

By its combined action of contracting the peripheral vessels and of increasing the power of the heart it raises the blood pressure.

The diuresis which digitalis produces is chiefly due to increase of blood pressure.

Digitalis contracts the arterioles in the kidney sooner than those in other parts of the body. The renal vessels may contract so much as to arrest the secretion of urine altogether although the general blood pressure is high,

When blood pressure is already high digitalis cannot be expected to have a powerful diuretic action. But if the blood pressure be low, either from natural constitution or disease, digitalis will have a diuretic action.

Digitalis is a local anesthetic but also produces pain. It therefore belongs to the class termed by Liebrich "anesthetic dolorosa."

In large or accumulated doses it gives rise to gastric irritation.

The action of digitalis is due to digitalin, digitaleine and digitoxin. These principles all have an action similar in kind but differing in degree.

The therapeutic actions of digitalis and of its active principles are that they: (a) regulate the heart's action, (b) assist a failing circulation, and (c) act as diuretics.

The regulating action of digitalis is useful in palpitation and functional disturbances of rhythm.

The most important use of digitalis and of its active principles is in the treatment of mitral incompetence, due either to disease of the valves or dilatation of the ventricle.

In cases of aortic regurgitation digitalis is: (a) unnecessary and not without dan-

ger when compensation is complete, (b) very useful when compensation fails.

When the blood pressure is already high digitalis may be injurious by increasing it still farther and thus causing symptoms of angina pectoris or tending to produce apoplexy.

Dysentery.

R. B. Hopkins, in the Wisconsin Medical Recorder for August, gives his plan of treatment in dysentery.

In a case seen early he uses the following prescription:

R. Sal. rochelle, sat. sol., 3ii
Tinc. opii camph, 3ss
Syr. rhei aromat., q.s. ad. 3iv

M. Sig. Two teaspoonfuls every hour.

This should be given until two or three free evacuations are produced. In later stages, when there is much blood and tenesmus, he recommends a suppository of

Ext. opii, gr. 1
Ext. hyoscyami, grs. 2
Ext. belladon. gr. ½

to be repeated as necessary.

In complicated cases where there is fever and peritonitis with distension he uses the ice bag or turpentine stupes if the cold can not be borne.

For the shock and bad circulation strychnine 1-20 every four hours, combined with aromatic spirits of ammonia. Irrigation of the colon with warm water or with pulv. acacia, one ounce to the quart of water. Proper diet and rest will land the patient on his feet.

Digestion of Breads.

In the Pacific Medical Journal for September, Alfred W. Perry contributes an article on the digestion of breads. He considers the dryness or moisture, starch and dextrine of the different kinds of bread. He says that there is no reason for ascribing gastric disorders (fermentations) to the presence of living bacteria in bread, for the heat of baking loaves of less than 2-lb. weight is enough (203 deg. F.) to kill all gastric fermentation bacteria which might have been in the materials used. Those found in the London examinations of Walsh were other innocent species, and these were found only in 4-lb. loaves. Dryness of bread with porosity, on which depends the amount of saliva which is absorbed in chewing, are the main factors in determining the digestibility of bread. If bread which is dry and porous is soaked in liquids before eating, or in the mouth while eating, its character of easy digestibility is taken away.

The Descendants of Hereditary Syphilitics.

B. Tarnawsky in a paper on this subject before the Paris Medical Congress as reported in the St. Louis Medical Review for September 1st, formulates the following conclusions :

The hereditary influence of acquired syphilis manifests itself with the greatest vigor on the second generation of syphilitics and causes a large number of miscarriages, still-born children, children who die during the early months; children presenting the manifestations of hereditary syphilis or of anatomic or functional dystrophies.

The influence of syphilitic heredity decreases markedly in the third generation, and shows itself by a very small number of miscarriages, children who are still-born, or die during the early months; by the absence of hereditary syphilitic manifestations in the individuals of the third generation, and finally by a notable decrease of dystrophies, in number as well as in intensity.

Acquired syphilis of the first generation is not transmitted to the third generation in the form of manifestations of hereditary syphilis. Yet immunity to syphilitic virus is not transmitted by heredity to the third generation.

Parents, the father or the mother, having hereditary syphilitic symptoms, either at the time of conception or during the pregnancy, do not transmit to their children syphilis in the hereditary form.

He has not had occasion in his observations to note a transmission of syphilis by heredity which skipped one generation, that is to say a transmission from grandparents to grand-children, the children of the former having remained free from syphilitic symptoms.

A second generation of syphilitics, not affected with a single manifestation of hereditary syphilis and not presenting any dystrophies, generally produce healthy offspring. It is to be noted that the dystrophies, which are sometimes observed in these children, may depend upon a hereditary influence entirely foreign to syphilis.

The dystrophies of the second syphilitic generation are not always transmitted to the third generation in the form of the same dystrophies.

Hereditary syphilis of the third generation is generally due to a new syphilitic infection contracted by the individuals of the second generation. Such an extra-uterine syphilitic infection of the second generation, which he has designated by

the name of "binary syphilis," is observed very often, especially in rural syphilis.

The third generation may have symptoms of hereditary syphilis in some instances, though rare, where the representatives of the second generation married individuals suffering from acquired syphilis.

Binary syphilis, that is to say the syphilis acquired by the second generation of syphilitics, exercises upon the third generation an influence much more harmful than the syphilis of the first generation upon the second. The belief in the injurious effect of hereditary influence exercised by binary syphilis on the third generation is based upon; (a) a relatively large number of miscarriages, children who are still-born or die during the first year; (b) the symptoms of hereditary syphilis in the third generation, with an enormous increase in the number of dystrophies (five times more frequent), and the much smaller number of normal children.

Sexual dystrophies of the second and third generations, anatomic and functional dystrophies, play an important role in the depopulation of syphilitic families.

One of the principal reasons for the rapid degeneracy which is seen in endemic syphilis, especially in the rural population, is binary syphilis.

The dystrophies observed in the third generation do not present, either by themselves or by their grouping, any particularity distinctive of their hereditary syphilitic production.

The injurious hereditary influence of syphilis acquired by the first generation manifests itself especially upon the second generation. It loses strength notably in the third, diminishes still more in the fourth generation, and then seems to die out altogether.

Drinking Water.

J. H. Linsley and B. H. Stone in the Medical Record for September 1st, discuss the significance of the bacillus coli communis in drinking water. They say that the search for the typhoid bacillus in water is carried on with much difficulty, and results are very uncertain. This is due to the fact that the germ does not increase to any extent in water, and so the relatively small quantities which are necessarily handled in an examination may easily contain none of them, and to the difficulty encountered in separating this germ, when present, from the more resistant bacillus coli communis. We cannot, therefore, rely on the failure to find the germ in water as a positive proof of its absence, but we can say that

the water contains no typhoid if it fails to show colon bacilli. In the laboratory experiments we have not succeeded in keeping the more virulent germ alive in water over four weeks, while the colon bacillus will live a much longer time and is much more easily isolated.

From the consideration of all these facts we are driven to conclude that waters in which the bacilli coli communis are found to exist for any length of time are dangerous to the public health, and that the only safe course is to condemn all such.

In reply to the argument which is sure to be advanced, that people have drunk the waters which you condemn, for years, and are still living, we may use Professor Sedgewick's words in answer to a similar argument: "Look here, did you ever see a G. A. R. procession? They look pretty healthy. Well, then, war isn't a bad thing, judging by these people." Now the point is the same in both cases. These are the survivors. We don't see those who are lying in the graveyards hereabout or at Arlington or else where, and because you and I and a half-dozen others have been tough enough to stand all of these things, it does not follow that a lot of people have not died of them or will not if subjected to the same conditions.

Dislocation of the Heart.

Albert Abrams, in the Medical Record for September 8th, calls attention to a new physical sign in dislocation of the heart from dilatation of the stomach.

He says that when the heart is dislocated upward by a dilated stomach, a patch of dulness and even flatness may be detected in the interscapular region on the left side, about midway between the vertebral column and the internal border of the scapula. This is the usual site, although the patch of dulness may reach a point on a level with the spine of the scapula. The dull area may vary in size from that of a silver dollar to the entire space between the scapula and spine. It always disappears to be replaced by the normal lung resonance when the patient leans forward, reappears when the erect posture is again attained, and the area of dulness is greatly increased by directing the patient to bend backward. Over the area of dulness, bronchial respiration is heard, but this likewise disappears when the patient bends forward, or becomes increased in intensity when the patient leans backward. The cause of the dulness is compression of the lung by a dislocation of the heart upward. This sign, he says, is constantly present.

Dextrose in Urine.

Heinrich Stern, in the Journal of the American Medical Association for September 22d, concludes his article on the identification of dextrose in human urine.

In concluding he says that there is not a single method which is entirely free from possible sources of error. Some of the processes for the recognition of grape sugar in human urine, it is true, possess considerable value and are relatively trustworthy; perfection, however, is not found in any. Absolute reliance can therefore not, and should not, be placed on any single test. Among the numerous methods in vogue, three especially are of considerable value, namely, Nylander's, Penzoldt-Rubner's and the fermentation tests. The great value of Nylander's modification of the bismuth test is virtually but an indirect one—the non-reduction of the bismuth salt being positive evidence of the absence of pathologic amounts of dextrose.

Penzoldt-Rubner's ammonia-lead acetate reaction is the most brilliant and reliable process at the command of the physician, the fermentation test being a close second in point of reliability. There are two great advantages the Penzoldt-Rubner test possesses over the fermentation process, viz., it renders immediate results and its limit of reliability is more extended. Although a single testing method *per se* can never furnish positive proof of the presence of urinary glucose, especially when this occurs in amounts less than 5 per cent., a number of judiciously selected control tests cautiously applied may complete the identification.

For the positive recognition of dextrose in human urine—in routine work—proceed in the following manner: About 25 c.c. of the freshly voided, non-amoniacial urine is boiled and filtered. To a portion of the filtrate Nylander's test is applied. If, after prolonged boiling the precipitate retains its white color, stop with the testing there and then, as no pathologic quantities of grape sugar are contained in the urinary fluid. If, however, the bismuthic salt has undergone even a slight reduction, another portion of the filtrate is subjected to the modification of the Penzoldt-Rubner process described in the foregoing. In case the careful and repeated application of this test yields but negative results, it may be concluded that the urine is free from dextrose. On the other hand, if a pinkish spot has appeared on the heated region of the sediment, indicating the presence of either glucose or a glycuronic-acid compound, a fresh portion of the urine is boiled, filtered, and subjected to the fermentation test in the urino-glucometer. If after the apparatus has been

placed for a few hours under the proper temperature, the urine does not show a reduced density, either no glucose at all or in amounts less than 5 per cent. or anti-fermentative agents are contained in it. A loss in specific gravity taking place soon after subjecting the urine to fermentation points with certainty to the occurrence of grape sugar in quantities above 5 per cent.

The urine, it is needless to say, must be in all instances a sample of the 24 hours product, and the patient during the day of its collection and the 24 hours preceding it should not be under the influence of any medicinal substances.

Diaphragmatic Hernia.

E. W. Walker in the *International Journal of Surgery* for September reports a case of diaphragmatic hernia in a man aged 29 who was struck down by a falling tree. The hernia was reduced through an abdominal incision and the patient made a good recovery.

After reviewing the literature on the subject he concludes that in all cases of so-called internal strangulation, one should always think of the possibility of a diaphragmatic hernia.

When the physical examination reveals a diaphragmatic hernia as probable, an operation is imperative when the symptoms of obstruction are present.

In recent cases, if the diagnosis has been made early, laparotomy is probably the better operation.

In old cases, on account of the difficulty of reducing the gut, ligating the sac, and stitching the rent in the diaphragm, the trans-pleural route is preferable.

If, after making a laparotomy, the gut cannot be reduced, a thoracotomy is justifiable.

Erosions of the Stomach.

Edward Quintard, in the *Medical Record* for September 15th, reports a few cases of erosions of the stomach. He says that they belong in a distinct class and should not be confounded with cases of ordinary ulcer.

These cases were first described by Einhorn, and respond readily to treatment by lavage and nitrate of silver solution, 2 to 1,000, applied in the form of spray.

He concludes that from time to time we see patients in whose stomach washings are repeatedly found small fragments of the gastric mucous membrane; on an average one to four of such pieces are found in a washing, their size varying from 2 to 7 cm.

long and about 2 to 3 cm. wide; that the repeated finding of such pieces of mucosa in the wash water shows that we are dealing with a case of erosion.

That such erosions occur under varying pathological conditions, and that as a consequence the functional signs vary accordingly.

That the exact etiology and pathology of such erosions are at present not definitely known; that in the great majority of cases at least where such tiny fragments of mucous membrane are found in the wash water the patient gives a definite and peculiar clinical history distinct from that of round ulcer or from the exulceratio simplex described by Dieulafoy.

That as a consequence these cases should be regarded as a distinct class clinically and treated as such.

Enemas After Abdominal Section.

Hunter Robb, in the *Cleveland Medical Gazette* for September, gives some very practical notes on the use of enemas after abdominal sections.

For the first, which is sometimes so distressing after an abdominal section, an enema consisting of 500 c.c. (one pint) of tepid water may be slowly administered, being repeated if necessary.

Nutritive enemas are often employed at intervals of three or four hours. They should not be given more frequently than this for fear of rendering the rectum intolerant of them. The enema should consist of milk with whisky or brandy, together with white of egg and a little common table salt. The following proportions make a good combination and may be given by means of a hard rubber syringe or through a rectal tube:

- R. Peptonized milk, 30 cc. (3i)
- Whiskey, 30 cc. (3i)
- The whites of two eggs.
- Common table salt, 1-5 (grs. xxiv)

The rectum should be thoroughly irrigated every morning with warm physiological salt solution which will keep it clean, so that the nutritive enema will be better absorbed.

For opening the bowels a high enema consisting of 500 cc. (one pint) of soap-suds in warm water should be given. The rectal tube having been introduced well up into the rectum, the mixture of soap-suds and water is poured into a glass funnel attached to the external end and allowed to run slowly into the bowel. Sometimes a litre can be introduced in this way. If the enema does not prove effectual, it may be

repeated after three or four hours, or we may substitute one consisting of warm water, oil, turpentine, in the following proportions:

- R. Plain warm water, 500 cc. (oj)
Olive oil, 60 cc. (3ii)
Turpentine, from two teaspoonfuls to a tablespoonful.

This may be repeated once or twice at intervals of two or three hours, but generally the first enema is followed by a satisfactory evacuation of the bowels. If preferred, from 120 to 180 cc. (4 to 6 oz.) of warm olive oil or glycerine may be first injected in order to soften any fecal matter that is in the rectum, an enema of soap suds and warm water being given an hour or so later. Occasionally the addition of an ounce of epsom salts to a pint of warm soap-suds and water will prove effectual when other enemata have failed.

In a series of 114 consecutive, unselected, abdominal sections without a death one or more of the above enemata were employed as a routine practice.

Estimation of Hydrochloric Acid.

In writing of diseases of the stomach in the Medical Fortnightly for September 10th, J. M. G. Carter recommends Topfer's method for detecting the presence of hydrochloric acid in the stomach contents.

Three solutions are necessary:

- 1st. A one-half per cent. alcohol solution dimethyl-amido-azo-bensol.
- 2d. One per cent. aqueous solution of alizarin.
- 3d. One per cent. alcohol solution phenolphthalein.

Add a few drops of solution 1 to 10 c.c. of gastric juice in the flask. If free HCl is present, even in small quantities, a red color occurs. Titrate with decinormal soda solution until the red changes to a clear yellow. Note the number of c.c. soda solution used. To 10 c.c. filtered gastric contents in a beaker add a few drops of solution 2 and titrate with a decinormal solution of caustic soda until the solution assumes a clear violet color. Note amount of solution used. To 10 c.c. of gastric juice add two or three drops of solution 3 and titrate with decinormal solution of caustic soda until light rose color is developed; agitate until color is permanent and record the number of c.c. of soda solution employed.

Since solution 1 reacts only in the presence of free hydrochloric acid, and solution 2 reacts in the presence of hydrochloric acid, organic acids and acid salts, by subtracting the figure found in the first titra-

tion from the figure of the second, the remainder will indicate the acidity due to organic acids and acid salts. Subtracting again the acidity found by the alizarin solution from that found by the phenolphthalein solution will give the amount of combined hydrochloric acid.

Expectancy of Life in Cases of Cancer of the Breast.

Author Baker, in a clinical lecture as reported in the Hospital for September 15th, said that at the present moment the outlook of a woman with cancer of the breast was by no means so desperate as, say, 20 years ago, either in regard to the prospect of prolongation of life by operation, or even of obtaining complete immunity from recurrence. From an analysis of a hundred consecutive cases in which he had excised the breast, he showed that 16 per cent. lived over five years, and 33.7 per cent. over three years. He did not, however, claim that such cases were "cured," since a certain and a not inconsiderable proportion had died most likely from recurrence after an interval of immunity of over three years. Still, only 7 per cent. suffered from local recurrence, the disease when it had returned usually affecting the internal parts, which was a good feature of the modern operations, local recurrence being most depressing and painful, while internal generalisation was not so. Some of these cases, indeed, gave ground for hoping that this disease might really be eradicated by the knife, and it was not, he said too much to hope that, with still further improvements in early diagnosis and treatment, a far larger proportion of cases might in future be saved. Mr. Baker laid down the following axioms: (1) Excision of the breast to be effectual must be early. (2) That overlying skin, subcutaneous fat, pectoral fascia, axillary fat and glands, with the entire breast, must be widely and deliberately removed. (3) During this dissection all division of carcinomatous tissue should be avoided, and if inevitable freshly sterilised instruments should be used. (4) As little direct handling of the parts as possible should take place. (5) Arrest of all immediate bleeding should be accomplished, preferably by forcipressure, and if not by ligature, and all subsequent oozing by elastic pressure and bandaging. Rest for the wound and the patient should be secured for at least two weeks. (6) All this extensive removal can be accomplished with but little risk to the patient in fairly early cases. (7) When the disease has infected the muscles palliation alone can be

expected from surgical interference, and it is questionable whether very extensive operations involving risk from shock ought to be performed with only this end in view. Mr. Baker went on to say that the more localised the primary focus of the carcinoma in the breast appeared to be, the more justified was one in running some risk of shock in doing a wide-reaching operation, because there was in such cases a fair prospect of obtaining complete eradication of the disease thereby. The converse rule appeared also to have much to recommend it—viz., that the more wide-reaching the disease the more clearly should the operator keep mere palliation in view, and by limiting his operation avoid the risk of extreme shock.

Eye Strain.

Albert E. Bulson, Jr., in the Fort Wayne Medical Journal-Magazine for August, in discussing this subject says that eye strain, and in the large majority of cases this means error of refraction, may be the unsuspected cause of headache, eye pain, inflammation of the eyes, blurring of vision, and many nervous manifestations, relief from which is found in a properly fitted pair of glasses.

The accurate determination of errors of refraction can only be accomplished satisfactorily in the majority of cases by subjective tests conducted while the patient is under the full effects of a reliable cycloplegic, supplemented by the objective tests with ophthalmoscope, ophthalmometer, and skiascopic mirror. This will require an unusual amount of patience on the part of the examiner and the exercise of the highest kind of technical skill.

The satisfactory correction of the known error of refraction will demand a consideration of the health, temperament, environment and occupation of the patient, and this will require the application of the keenest judgment, based upon the teachings of experience obtained in the critical and detailed observation of many cases of refractive error and its attending varied manifestations.

Fibromas and Pregnancy.

According to Obstetrics for August, Doleris, in La Gynecol. for April 15th, discusses this subject under several heads.

What is the influence of uterine fibroids on fecundation? We can only say that sterility is found more frequently in subjects with fibroma.

What is the frequency of abortion and premature labor in fibroid cases? Doubtless pregnancy is interrupted more frequent-

ly in these cases but this fact is overshadowed in importance by the greatly increased gravity of the prognosis under such circumstances.

What accidents are most commonly observed in ordinary gestation when a fibroid is present? There are pain, due to rapid growth of the tumor, and the various accidents of compression. At the time of delivery we have to fear hemorrhage, and after expulsion both hemorrhage and infection.

What is the fate of a fetus developed within a fibromatous uterus? Aside from the increased likelihood of abortion the infantile mortality at term has been placed as high as 60 per cent.

Doleris now collects various statistics with the intention of ascertaining the results of surgical intervention during gestation. Some of these are as follows:

During the period 1890-1900 the maternal mortality from myomectomy was 9 per cent., from supravaginal hysterectomy 18 per cent., and from total abdominal hysterectomy 3 per cent.

Of intervention at or near term, the results were: Supravaginal hysterectomy, 16 recoveries out of 17 operations; total hysterectomy, 10 recoveries out of 13 operations.

Doleris rejects absolutely the recognition of Cesarean section, i. e., the conservative operation—as an indication for fibroma at term under any circumstances,

Gelatin Injections in Aneurism.

A. L. Nietert, in the Interstate Medical Journal for September, reports five cases of aneurism treated by gelatin injections.

One was of the left subclavian and four of the aorta.

Two grains of white gelatin were dissolved in 100 c.c. of a seven per cent. solution of sodium chloride and sterilized.

In the first two cases as high as 150 c.c. were injected every day until 760 c.c. were used.

In the other three small amounts were used daily until in one case 2250 c.c. of the solution were injected. From a study of these cases he concludes—

That great pain at site of injection often follows introduction of a large amount of the fluid.

The gelatin being a good medium for the development of micro-organisms, great care is required to keep it sterile.

The symptomatology is greatly improved in every case; the pain is usually lessened, patient breathes easier and shows less pressure symptoms on important surrounding organs.

In most cases tumor becomes more firm and expansibility less marked.

It is likely that great good can be effected by the gelatin injected in aneurism of the smaller vesicles.

Post-mortem examination in every case shows large organized clots, filling the cavity of the aneurism, which were undoubtedly due in a great measure to the gelatin.

Gastro-Intestinal Diseases of Infancy.

J. D. Dunham, in the Columbus Medical Journal for August, says that in the treatment of these conditions we should consider first the food. Milk should be at once discontinued in the severe infections. The best culture medium for the toxicogenic bacteria is milk, hence we must stop the process in this manner.

In the cases of milk infection, lavage of the stomach should be practiced as well as thorough cleansing of the lower bowel with plenty of water. Some drug such as castor oil should then be given to relieve the small intestine of the poisonous matter.

Next in order is the administration of some antifermentative drug. Of these the subnitrate of bismuth is the best.

Many others have been praised and then discarded, but this long-used remedy we really know produces some effect in the bowel.

The use of salol in the diarrheas of infants in the doses usually recommended is of no value. An amount of this drug sufficient to cause any bactericidal action is quite likely to poison the child.

In the management of the affections under consideration we must not forget the value of country air.

Hay Fever.

Next to a case of constipation, a case of hay fever is the hardest thing to treat with any satisfaction to the patient or physician.

R. Alexander Bate, in the American Practitioner and News for August 1st, says that the treatment must embrace both the attack and diathetic condition. Treatment of the attack consists in establishing the equilibrium of the circulation, freeing the blood of uric acid, relieving the hyperesthesia, and removing the exciting cause. For the disturbed circulation such medication is indicated as raises the acidity of the blood and renders it incapable of absorbing uric acid.

The acid phosphates, the iodides, the salicylates, the coal-tar derivatives, the acid salts of alkaloids, especially morphine and atropine sulphate, are among the most pop-

ular. The nitrites have the double action of controlling the uric-acidemia and dilating the capillaries. The fame of a certain popular hay fever resort in the Kentucky mountains is due to a spring, whose waters probably traverse a saltpetre bed (commonly known to the natives as the Witches Mine.)

The internal administration of the principle secreted by the suprarenal gland is of service for its tonic action upon the vasomotor system. Likewise this adrenal extract is used locally to contract the dilated blood-vessels. The hyperesthesia is best controlled by local applications. Cocain and its synergists, menthol, eucalyptol, camphor, morphine, and atropine sulphate, antipyrine, and orthoform, are deservedly popular. Cauterization of the areas of hyperesthesia and removal of nasal abnormalities has proven beneficial in fifty per cent. of cases. Cauterization may be done either by means of the actual cautery or by means of trichloroacetic or glacial acetic acid, which is supposed to have a selective action upon the ciliated epithelia. However, out of one hundred and seven cases (all ages) tabulated by one author, forty-two possessed normal mucous membranes. The exciting cause, whether emotional or material, should be removed. An ocean voyage is said to relieve any case by the third day. The atmosphere over the ocean relieves the uric-acidemia by its iodides, and is free from all irritants. Since the arthritic diathesis is the actual cause in nearly one hundred per cent. of the cases of hay fever, the most important treatment is that directed toward the constitutional taint.

By proper diet and hygiene immunity can usually be conferred. The diet must be free from uric acid and its congeners. Such articles of diet must be eschewed as red meats, alcohol and sweet beverages, tea, coffee, chocolate, tomatoes, bananas, and strawberries. The food permitted embraces white meats, as the breast of fowls and fish; lentils, as watercresses, lettuce, spinach, etc.; vegetables generally; breads, fruits, and nuts.

Hygienic treatment consists in the use of all means of increasing oxidation, such as outdoor exercise, baths, massage, sea voyages, mountain climbing, etc. A warm, dry climate is to be preferred, and a change of environment is always advantageous. Prophylactic medicinal treatment consists in freeing the system of uric acid, and is, therefore, the opposite of the treatment of the attack, which is to free the blood of uric acid. This embraces the exhibition of such antilithic remedies as the salicylates, the lithia salts, piperazine and its combina-

tions, arsenious and quinic acids, or their salts, and an occasional cholagogue. Personal observation has been that antilithemic treatment, aided by suprarenal extract, internally and locally, together with local sedatives, has relieved the necessity of sufferers seeking hay fever resorts.

Heart Disease in Children.

Albert Abrams in the Medical Standard for September is discussing diseases of the heart in children says that the movements of the heart begin one-eighth of a minute after birth.

The normal apex beat is usually in the fourth interspace just outside the mammary line. This position has been attributed to the greater relative narrowness of the infant's chest in the transverse diameter and the relatively larger heart. The heart is nearer the anterior surface of the chest than in the adult. Symington contends in opposition to the current belief that the position of the heart and great vessels is the same as in the adult.

Functional disorders: Up to the seventh year cardiac action during sleep is often of unequal strength and rhythm and prone to be irregular in the healthiest children during sleep and greatly influenced by breathing (Da Costa). Irregularity during waking hours indicates cardiac disorder unless there are evidences of meningeal disease (Smith).

Bulging of precordia more frequent in cardiac diseases of children owing to flexibility of thorax.

Aneurisms under the age of 20, if not traumatic in origin are caused by embolism from a pre-existing endocarditis. The cerebral arteries are most frequently involved.

The ductus arteriosus is not obliterated as a rule until two weeks after birth. Persistence of the same after the first month is pathologic.

Most frequent congenital lesion is stenosis of the pulmonary artery.

The most common evidence of a congenital heart lesion is cyanosis. It affects more male infants—180 cases, two-thirds males (Aberle). Cyanosis does not always commence at birth and may be retarded in appearance for years. Clubbing of the fingers and toes and a pigeon-chest are two common abnormalities in cyanosis. Other general conditions are lack of heat and retarded development.

Prognosis in cynosis: Thirty-five per cent die before the end of the first year; more than two-thirds die before the age of eleven years, and only five lived more than

45 years (in 159 cases collected by Aberle). The most frequent modes of death are convulsions, dyspnea, hemorrhage, coma, and phthisis.

Most frequent lesions in cyanosis: Stenosis of pulmonary artery, transposed aorta and pulmonary artery, one auricle and one ventricle, right ventricle divided into two cavities by a supernumerary septum. In more than half the cases the lesion is located in the pulmonary artery.

Homatropin as a Cycloplegic.

E. C. Ellett, in the Journal of the American Medical Association for September 15, gives a clinical study of the relative value of homatropin as a cycloplegic.

He says that the necessity of cycloplegia in order to accurately test the refraction of young people is established, though satisfactory fitting can doubtless often be done without it. (Note the distinction between accurate and satisfactory).

Atropin is, all things considered, the most reliable cycloplegic, but a great objection to its use is the length of time consumed.

For testing the average case, without much chorioretinal irritation or marked ciliary spasm, homatropin, properly used, is sufficient.

The best method is that of the homatropin and cocain discs, made after the formula and used after the method of Dr. Casey Wood.

In many cases atropin must be used, to relieve spasm, to procure rest and thus to allay chorioretinal irritation. In these cases the patient can no more justly object to its use than he can to its being used in iritis. In both cases his time and his business interests are secondary to the ultimate attainment of useful vision,

Hysterectomy.

W. H. Haughey in the International Journal of Surgery for September in discussing this subject takes occasion to answer certain objections to the removal of the female organ.

Proposition 1st.—That her life will be shortened. If she survives the shock of the operation, manifestly her life will be lengthened and also made more tolerable, as she will be relieved of the diseased condition for which the operation was done, also all its concomitant nervous reflexes. Therefore, while she may not attain a ripe old age, she has a fair chance to live much longer and more contentedly and comfort

ably than she could with the diseased condition.

2nd.—That she will become coarse and masculine. Does a woman become masculine after the menopause? and what is a hysterectomy but an earlier establishment of the menopause? It is simply in compliance with the general physiological law of nature, removing a part that is no longer useful or in use; the uterus and ovaries undergo atrophy after the menopause. Therefore, the natural supposition is that the organs are not used by the animal economy after that period, and it matters not whether this period is approached naturally or artificially induced. Nature's laws in this regard are not outraged, the woman's gender is not changed or varied, and she retains her femininity and is not more unsexed than is any woman who has passed the menopause.

3d.—That sexual passion and capacity will be obliterated. This is no doubt true in most cases as far as passion is concerned, yet we all know of many marked exceptions. However, the question is not worthy of serious consideration, because the diseased conditions that require the operation not only render her passionless, but made her physically incapacitated for sexual congress. Therefore, when coitus is rendered painless or bearable at best, the condition is improved and the argument does not count.

Hysterectomy for Intramural Fibroids.

Jeff. Miller in the New Orleans Medical and Surgical Journal for September reports a case of intramural fibroids in a well nourished negro woman, aged 30 years, married, was first seen July 8, 1900. She stated that her menstrual flow appeared when she was 13 years of age, and remained regular and normal in every respect until June, 1899, since which time the flow has been protracted and profuse in quantity, gradually increasing until just prior to admission to the hospital the loss amounted to considerable hemorrhage and lasted two weeks. She has never conceived. Simultaneously with the above mentioned derangement in the menstrual flux there was pelvic discomfort, backache, vesical tenesmus. Physical examination revealed the presence of a mass about the size of a clinched fist apparently involving the upper portion of the uterus. A diagnosis of intra-mural, multinodular and subserous fibroids of the uterus was made and operation of hysterectomy elected. The patient being prepared, under chloroform anesthesia, the entire uterus was removed through the

supra-vaginal route. The right ovary was found to contain a blood cyst and appeared otherwise diseased, and was accordingly removed. The left ovary and tube, being normal, were left intact. The wound was closed with silk worm-gut sutures—no drain being used.

The tumors were about the size of a large hen's egg. They occupied the uterine cornua on both sides. The cavity of the uterus had been very much encroached upon, and could contain no more than 10 or 15 drops of fluid. Patient has done well since operation. Nine days have elapsed, the pulse and temperature are normal. The wound never suppurated.

How to Give Digitalis.

Hale White, in Hospital for September 8th, gave various hints as to how to give digitalis.

One formula which he recommends was as follows:

R. Tinct. digitalis, fl. dr. 3.
Tinct. nucis vom., fl. dr. 1½.
Caffein, gr. 50.
Sodii salicylatis, gr. 25.
Syrupi aurantii floris, fl. oz. 1.
Aquam ad., fl. oz. 10.
Fiat mistura.

One ounce of this mixture was to be taken thrice a day. Some people might say that theoretically caffein ought not to go with digitalis, for caffein did not slow the heart or prolong the diastole, nor did it belong to the digitalis group of drugs. But it increased the cardiac force, and experience had shown clinically that it went very well with digitalis. It helped its diuretic action, and, in so doing, it did not irritate the kidneys as so many other diuretics did. Some, again, might think that if caffein were to be given it would be better to give the citrate; but citrate of caffein, although soluble, might be precipitated when the solution containing it was stirred. It remained, he said, in solution for a time, but when the bottle was shaken the precipitate fell, and the patient might use strong language about the doctor who wrote out such a prescription. It was safer to give caffein, which was easily soluble in water if salicylate of sodium were added to it in the above proportion. The nux vomica acted as a cardiac stimulant too. It was to be noted that, although the above was a full dose of digitalis, it was often necessary to use more than the amount given in this prescription. As a rule, in fact, digitalis was not given sufficiently freely, and usually the mixture above prescribed would require to be given

oftener than three times a day. Dr. Hale White warned his hearers against mixing citrate of caffeine with salicylate of sodium, which, he said, formed a voluminous precipitate, the bottle becoming filled with a compound which it was almost impossible to pour out at all.

Another excellent way of giving digitalis was as the famous combination known as the Guy's pill. One pill contained a grain each of mercurial pill powdered squill, and powdered digitalis leaves, and four grains of green extract of hyoscyamus. The only practical objection to this combination was that the digestive system of the patients might be such that they could not dissolve the pill. But still it was, without doubt, one of the best preparations of digitalis. The object of the squill was that it acted very like the digitalis, and also as a diuretic; while the reason of giving the mercury was that it was a well-known fact that its combination with the digitalis considerably increased the diuretic action of the latter. Unfortunately, the digitalis often made the patient sick, and if that should be the case the next best drug to try was strophanthus. But this was not a complete substitute for digitalis, in that it did not contract the vessels all over the body, so that one did not get the same help from it in the circulation as one got in the case of digitalis. But strophanthus also might make the patient sick, in which case the next drug to try was the tincture of convallaria majalis, the lily of the valley, and if this failed then chloride of barium in half-grain doses might be given.

Hemorrhoids.

In the Medical Age for September 10th, Joseph M. Mathews writes of ulceration of the rectum with external piles, and combined internal and external piles.

He prefers the ligature to any other method, as it is simple and easy of execution, requiring fewer assistants than the clamp and cautery plan. He advises the careful preparation of the patient before operation.

He transfixes the base of the pile and after tying each half separately the whole mass is included in the ligature. No matter how large the mass of hemorrhoids the operation should be completed at one sitting. The danger from after contraction is slight and can be easily remedied by dilating. The after treatment of piles consists in irrigating with bichloride solution and dressing of iodoform gauze, the latter should be packed in freely if you fear hemorrhage.

As a preventive of piles he recommends cold water and keeping the bowels open. The best local application is the following ointment:

R. Vaseline,	1 ounce.
Muriate of cocaine,	12 grains.
Morphine,	6 grains.
Calomel,	40 grains.

M. Sig. Apply locally night and morning.

If itching is severe use menthol locally, one drachm to an ounce of vaseline.

Intestinal Obstruction following Operation.

A. Goldspohn in the Medical Record for September 8th, reports two cases of intestinal obstruction following vaginal hysterectomy, and one after pelvic abscess with a secondary operation in each case.

He says that the secondary operation for the relief of post-operative ileus, to be successful, must be performed early before the mechanical obstruction has caused infection and paralysis of the bowels (peritonitis.)

When this difficulty arises early—within three to four days after an abdominal or pelvic operation, i. e., the time in which post-operative peritonitis can also be expected—it will often be difficult to exclude the latter, which also causes similar symptoms.

The symptoms and signs which speak mostly for ileus are: Abdominal distention without marked tenderness to touch on gentle pressure; the presence of rhythmical colicky pains; a slow pulse that is not wiry; fecal vomiting; vermicular motion of the small intestine, seen or felt through the abdominal wall; increased proportion of indican in the urine.

Infantile Cerebral Palsy.

Twenty-five cases of infantile cerebral palsy are reported by A. C. Cotton in the Journal of the American Medical Association for September 15th.

Under cerebral palsy he includes all conditions of impaired function due to cerebral lesion, even if the only symptom be mental deficiency or epilepsy. Of the 25 cases, 18 were females and 7 males.

Seven of the cases were diplegics. Convulsions occurred in 18 and more than half of all the cases were microcephalic. Only two exhibited athetoid movements.

As might be expected, dysphasia, more or less marked, seems to be the rule. It is interesting to note that the cases showing improvement in speech, after complete arrest, were hemiplegic. This is suggestive of the utilization of the unaffected side of

the cerebrum, which comes to the relief of aphasia caused by lesions occurring in early life. Of the seven cases of diplegia, four show permanent dysphasia, one can say but a few monosyllables, one is slow of speech, and one has difficult speech from paresis of muscles required in vocalization.

Intestinal Obstruction.

The term intestinal obstruction is applied to a variety of dissimilar conditions which have as a common symptom a stoppage of the fecal evacuation, says Randolph Winslow in the Maryland Medical Journal for September.

The condition is a serious one, and if not properly relieved, is followed by death.

He discusses the acute form which may be due to several causes, as strangulation by bands, adhesions, intussusception, twists or valvulus, foreign bodies, stricture or the pressure of tumors and fecal impaction.

He says that the prognosis of intestinal obstruction is always serious, but its gravity is materially diminished if the condition is recognized early and proper treatment instituted before sepsis or peritonitis has set in.

The treatment of a mechanical obstruction of the bowels is surgical, but in the early stages it may be impossible to discriminate for a time between mechanical and functional obstruction; hence at the onset an attempt should be made to move the bowels. Epsom salts, castor oil or croton oil may be given in sufficient quantity to cause free alvine evacuations, but if there is no expulsion of feces or flatus the use of purgatives should not be continued. High enemata should also be employed, but not much time should be lost in these efforts. If the judicious use of purgatives and enemata are not effectual within twenty-four or thirty-six hours laparotomy should be performed without further delay.

He reports three cases all ending in recovery by surgical intervention. In one the fourth laparotomy was necessary before final recovery.

Internal Hemorrhoids.

Charles J. Levison, in the Occidental Medical Times for September, describes a new operation for the treatment of internal hemorrhoids in ambulant patients, without sphincter dilatation or anesthesia.

He says that in the average case there is usually one and seldom two varices which cause most of the disturbance. The Kelly sphincteroscope is used to expose the area. The patient is placed in the knee-elbow position and the sphincteroscope is intro-

duced, which permits thorough inspection. It is here, in the majority of cases, that the internal pile is found. After the localization of the pile or piles a piece of cotton saturated with a ten per cent. cocain solution is applied for a few minutes; the cocain does not produce absolute anesthesia, but it diminishes pain to such a degree that patients do not object. The pile is then grasped with a Pean hemostatic forceps and pulled down. Coincident with the drawing down of the pile the speculum is removed from the anus; it is allowed to hang on the handle of the hemostat and, possessing considerable weight, aids in drawing the pile somewhat further out of the anus. The pile is now extruding, held by the forceps, which are weighed down by the speculum; it is then ligated with a silk ligature as near the base as possible, after which the forceps and speculum are removed and the ligated pile is returned to the rectum. The patient's bowels must move daily; he experiences no inconvenience, going about as usual. The pile desiccates and a practical cure results. If multiple varices are present the operation is repeated; but one sitting and the ligation of one group of varices in the majority of cases usually suffices. From the above description it will at once be recognized how easily this procedure can be carried out in the physician's office without any material inconvenience to the patient.

Masturbation.

C. A. F. Lindorme, in the Atlanta Journal-Record of Medicine for September, writes a very shakespearean article on the physiological therapeutics of masturbation.

He says that the will of the masturbator is important, that is the relation of the encephalic power to the general health and strength.

Masturbation does not come from exceptional sexual power, but rather from weakness. A sturdy, healthy boy will think of girls but not of masturbating. According to his philosophy want is the main constituent of life, and the proper rule of living is to never gratify want except in nursing it through its satisfaction. Want is not a drawback from happy nature but we should have our want under control. Masturbation is a dirty subject, but it should be studied from every conceivable point of view.

The boys of our country grow up in ignorance to live a life of shame and no man puts forth his hand to save them, except the quack and bogus sanitarium, until it is too late.

Inebriety.

In a paper read before the Mississippi Valley Medical Association at Asheville, T. D. Crothers discussed the curability of inebriety by medical treatment.

He stated that inebriety is a neurosis, usually self-limited, and very largely curable. The craze for drink is symptomatic. The real causes are central nerve irritation, exhaustion, poisoning, and starvation. The success of the treatment depends upon accurate knowledge of the causes and conditions present in each case, and the accurate application of general means and measures for their removal. Each case requires special means and measures particularly adapted to meet the conditions present. The family physician as well as the specialist should treat these cases successfully.

Ergot.

F. A. Seymour, in Merck's Archives for September, has an article on the limitations of ergot. He says that attention of late has been called to the fact that in some cases of uterine hemorrhage in middle life the cause is evidently arterio-sclerosis, a condition quite beyond the influence of the vaso-motor nerves, and manifestly to be made worse by the furrows of the curette.

While using ergot in the treatment of uterine fibroid, we have seen it induce a most persistent diarrhea, doubtless by its influence on the peristaltic muscles. Yet it is often given for the control of intestinal hemorrhage. A protective clot stands a poor chance of adhesion under its gripe.

More perilous still is the employment of this drug in cerebral or pulmonary bleeding. While the cerebral vessels have no vaso-motor nerves, yet by induced constriction elsewhere, the blood-pressure within the cranium may be disastrously intensified. In pulmonary hemorrhage the increased vascular tension occasioned by physiological doses of ergot unquestionably aggravates the condition, and it should never be used.

Knee Joint Surgery for Non-Tubercular Conditions.

A report of 38 operations for synovial fringes, injured semilunar cartilage, loose cartilage, coagula, exploratory incisions, etc., is made by Joel E. Goldthwait in the Boston Medical and Surgical Journal for September 20th.

The purpose of the paper is to show, by considering the results obtained in thirty-eight operations, that operation upon joints need not be feared more than

operations upon other parts of the body, and because of this to urge the importance not only of operating to relieve a definitely recognized condition, but also to make use of exploratory incisions in the doubtful cases to determine the exact nature of the disease. Without this it is impossible in many cases to differentiate in the incipient stage between several different conditions, and it is at this very time that the most can be accomplished in the way of treatment if the exact conditions is known.

Of the 38 operations, 1 was for the removal of a loose cartilage; 2 were for permanently dislocated patellæ; 7 were for exploration to determine the nature of the disease; 9 were for removal of an injured or displaced semilunar cartilage; 19 were for the removal of synovial fringes or masses of coagulated fibrin.

No unpleasant results followed the operations except in 1, a case of osteo-arthritis, in which the disease was apparently made more acute. The exploratory incision, with this one exception, did not alter the course of the disease. The case from which the semilunar cartilage was removed have functionally normal joints. The cases in which the synovial fringes and coagula were removed are improved in proportion to the nature of the disease which caused the condition to be present.

Lacerations of the Cervix.

John B. Shober in the Journal of Medicine and Science for August calls attention to the importance of repair of this condition. In regard to the operation he gives a word of warning.

He says that there is no operation which is more frequently botched than the repair of the cervix, and the reason of it is that the sutures are so placed that only the mucous membrane of the vagina and a small edge of the substance of the cervix are included in the sutures and a condition of incomplete tear results which leaves the patient no better off than she was before. The uterine and cervical discharges find their way between the cut edges and union does not take place so that when the sutures are removed only the vaginal mucous membrane is united and this often breaks down. The sutures should be so placed as to include all of the substance of cervix on each side from the angle to the os, each suture going through the edge of the mucous membrane of the cervical canal on both anterior and posterior lip on each side. When so applied the edges are everywhere brought together, leaving a narrow cervical

canal. The edges of the cervical canal being thus united, discharges cannot find their way between the edges of the cervical wounds and perfect union takes place. The best suture for this operation is silk worm gut, shot. The ends should be left long and held together by being clamped in a large perforated shot. Before every operation for repair or amputation of the cervix the uterus should be thoroughly curetted. If this is done and the operation properly performed, involution of the cervix and body of the uterus takes place rapidly, a healthy and normal endometrium reforms, leucorrhea is checked, the backache, headache, dyspepsia and reflex nervous symptoms disappear and the patient is soon restored to health. Perhaps the most important result of all this is the fact that a focus for the possible development of cancer has been removed.

It is most important to bear in mind that if under appropriate preparatory treatment for repair of the cervix, the erosion and hypertrophy does not improve, no operation should be attempted until the possibility of beginning epithelioma has been eliminated by a careful microscopical examination of a piece of suspected tissue.

Ligation of the Aorta.

According to the Medical News for September 1st, W. W. Keen reported a case of this kind before the International Congress. The operation was performed for aneurism of the abdominal aorta.

The ligation was made just below the diaphragm. The patient made a good recovery from the operative procedure itself, being up and around the ward. The aneurism began again to pulsate, probably from re-established collateral circulation. Forty-eight days after the operation the patient died. The autopsy showed an ulceration of the aorta, due to the ligature, and secondary hemorrhage. Dr. Keen reviewed the twelve other reported cases. In all death had supervened by reason of secondary hemorrhage or direct operative causes. The tugging at the elastic wall of the aorta probably induces the ulceration. Murray's method of preliminary aortic compression is worthy of consideration.

Middle Ear and Mastoid Diseases.

Redmond W. Payne in the Pacific Medical Journal for September reports several cases of suppurative middle ear and mastoid disease with some of their brain complications. He endorses Dalby's position in regard to the complete mastoid operation.

That the cure of chronic otorrhea could

not be affected by a simple opening of the mastoid; that the tympano-mastoid operation, which involves surgical damage to the tympanic structures, is not applicable or justifiable in acute cases, and in regard to chronic otorrhea he says they should be treated by two operations:

The operation for the removal of all disease, viz: the complete tympano-mastoid operation.

This bone wound should be covered by epithelial grafting covering the whole cavity.

As to the indications for the operation he says that it is immediately necessary in the following: (a) Cases in which septicemia has commenced. (b) Cases in which there are dead and carious bone in the tympanic cavity accompanied by ominous symptoms often repeated. (c) Whenever there is evidence of mastoid disease of long or short standing.

Mortality of Hysterectomy for Fibroids.

F. H. Davenport in the Boston Medical and Surgical Journal for August 23d, in discussing this subject says that out of 19 hysterectomies for fibroids he has had two deaths.

Of the 19 cases, the lives of six were threatened by the growth.

He does not believe that every fibroid tumor should be operated on but when they are causing symptoms which interfere with the patient's enjoyment of life they should be removed.

Modern methods of operating have lessened the weight of some objections; thus in young married women who do not contemplate with equanimity the loss of the uterus and an absolute end to all possibility of pregnancy, the hope that a myomectomy can be done may be held out. Increased experience shows that this may be done in the case of tumors of considerable size, and many a woman would be willing and glad to part with her tumor if she need not thereby lose uterus and ovaries.

Morphine in Surgical Practice.

Edward Martin in the Therapeutic Gazette for September says that the general indications for the use of morphine in surgery are as follows:

Morphine should be given hypodermically and in doses sufficient to accomplish the purpose for which it is given.

When surgical shock is attended by such severe pain as to cause uncontrollable restlessness, morphine should be given in doses adequate to relieve it. The same treat-

ment is indicated for shock-restlessness without pain (usually due to hemorrhage), the appropriate general treatment for shock being also carried out.

Morphine is the best internal hemostatic in the treatment of hemorrhage. When the hemorrhage is complicated by restlessness morphine is absolutely indicated because of its quieting effect upon both mind and body.

When drunkards, or exceptionally neurotic patients, are to be anesthetized preliminary hypodermic injection of morphine renders such anesthetization quicker, easier, and safer, and favorably affects the stage of recovery. Obstinate and exhausting vomiting after ether is sometimes relieved by morphine.

If in the first twenty-four hours after operation pain becomes so severe as to cause uncontrollable restlessness, this pain should be relieved by morphine. To this rule there are practically no exceptions, it applies to all operations regardless of the operative area.

When used in accordance with these indications the beneficial effects of morphine so overshadow its injurious effects that the latter are not demonstrable. To this rule there may be a very few exceptions.

Mosquito in Malaria.

P. L. Campbell, in the Virginia Medical Semi-Monthly for August 24th, says that the most advanced thinkers in the profession to-day are of the opinion that the mosquito plays an important part in the transmission of malarial fever to man.

Manson thinks that the mosquito is the agent that removes the parasite from the human body and gives it an opportunity of continuing its existence as a species. He considers malaria as a disease of insects, the malarial organism being agrariniiform and being able to live either in the body of man or the mosquito.

Ross claims that he has given malaria to healthy men by administering to them water in which malariated mosquitoes had died.

Ziemann has for over a year been collecting evidence bearing on the mosquito theory of the propagation of malaria. After a laborious search, which included the investigation and sectioning of hundreds of individuals of thirteen different species of mosquitoes, a variety of anopheles was finally found which gave a positive result. Thirteen per cent. of the mosquitoes of this species, caught in a certain malarial locality, contained in their stomachs malarial coccidia in various degrees of development and corresponding closely to those described

by the Italian investigators. Experiments with insects, cultivated from the larvæ, gave negative results, but the same insects, after sucking blood containing malarial crescents, became infected.

Normal Labor.

J. H. Cox in the Kansas City Medical Index-Lancet for September gives some practical points in the management of normal labor. He condemns the routine use of the ante and postpartum vaginal douche and the too frequent vaginal examination.

As soon as labor has begun he gives a rectal enema of soap and water. In irregular and painful contraction of the uterus he gives a hypodermic injection of morphine $\frac{1}{4}$ and atropine 1-150. In lagging pains he gives 10 or 15 grains of quinine and if there is still delay then chloroform and the forceps.

He likes the use of the binder as a help to the relaxed walls and a stimulant to the uterus.

The five points emphasized are, absolute cleanliness, not too frequent vaginal examinations discard the vaginal douche except in rare cases, the more frequent use of forceps under complete anesthesia, and the use of the binder.

Nutrition and Stimulants.

The address in Medicine before the Mississippi Valley Medical Association at Asheville by I. N. Love was on nutrition and stimulation.

The speaker said that continuance of life, commencing with the original protoplasm, the cell, depends upon proper nourishment. The recognition of this fact is essential in all the work of the doctor.

The proper nutrition of the new being, from the very beginning, prior to birth, should be carefully looked after by the careful physician. After birth the security of the infant depends upon the proper appreciation of its proper feeding. From infancy to maturity this should be the essential thought of the parent and the doctor, who should ever realize his importance as the helper of the parent in the building up of a complete man or woman.

The entire scheme of tissue building, of repair, of maintenance of the mechanism of the human body involves not only nutrition, but perfect elimination, and the two together are expressed in the term metabolism. Interrupted metabolism tends toward organic disease—death. Perhaps metabolism means perfect health.

Stimulants are of value if used in the

right way and at the right time. In the healthful condition they are not needed. They are essentially a luxury; all luxuries should be used with the greatest care, and only the thoroughly healthy can indulge safely in luxuries.

Stimulants are divided into two classes—those that are exclusively remedial and those that come under the head of luxuries associated with every day life.

Alcohol of all the stimulants, stands first; it is probably the most prompt diffusible stimulant we have. There are arguments for and against the thought that alcohol is a food.

Coffee and tea are essentially domestic pleasure, and while seemingly harmless they are potent whippers up of energy and should used with great care.

Tobacco has never been thought of as a food. It is primarily a stimulant, but like all other stimulants it is secondarily a depressant. It is a luxury pure and simple.

Morphine, cocain and others of their class are of great value to the profession, but improperly used are more deadly in their effects than the scalpel in the hands of the unskilled.

Occupation and Tuberculosis.

W. Freudenthal in the Medical News for September 15th, discusses the relationship of certain occupations to tuberculosis.

He collects 1576 cases, 1152 being males and 324 females. Among the males there were, tailors, 183; operators, 99; peddlers, 96; clerks, 54; pressers, 52; cigarmakers, 46; shoemakers, 30; cloakmakers, 30; painters, 27; furriers, 30; shirtmakers, 18; laborers, 12; capmakers, 13; cutters, 12; salesmen, 24; printers, 12; waiters, 11; tinsmiths, 11; agents, 13; school-boys, 10; book-keepers, 10; merchants, 18; butchers, 9; barkeepers, 8; watchmakers, 8; bakers, 8; musicians, 8; mechanics, 7; cooks, 7; drivers, 6; buttonhole makers, 6; paper box makers, 5; nurses, 5; photographers, 5; teachers, 6; conductors, 5; stand-keepers, 5 plush-case makers, 4; porters, 4; frame makers, 4; glass-blowers, 4; book binders, 4; barbers, 4 cigarette makers, 4; workers on brass, 3; druggists, 3; locksmith, 3; store-keepers, 3; packers, 3; spinners, 3; pocket-book makers, 3; pearl button makers, 3; necktie makers, 3; weavers, 3; rubber goods makers, 3; dressers, 2; gardeners, 2; trunk makers, 2; brush makers, 2; glass cutters, 2; collectors, 2; compositors, 2; housekeepers, 2; hallboys, 2; workers on passementeries, 2; book-keepers, 2; typesetters, 2; trimmers, 2; hotel-keepers, 2; spongers, 1; brushers,

1; glove-makers, 1; workers on silverware, 1; gasfitters, 1; overgaiters, 1; real estate business, 1; canvassers, 1; makers of fancy cases, 1; basket makers, 1; bandagists, 1; artists, 1; diamond worker, 1; spring-makers, 1; gunmakers, 1 papermakers, 1; diamond polishers, 1; worker on novelties, 1; fishermen, 1; caterers, 1; superintendents, 1; booksellers, 1; coppersmiths, 1; cordmakers, 1; reporters, 1; signers, 1; finishers, 1; founders, 1; upholsters, 1; drummers, 1; shipping-clerk, 1; rag assorters, 1; messenger boys, 1; newspaders 7; papers hangers, 1; tanners, 1; keepers of baths, 1; telegraph operators, 1; auctioneers, 1; ironers, 1; bottlers, 1; hat-makers, 1; watchmen, 1; Janitors, 1; workers in lead factories, 1; jewelers, 4; instrument makers, 1; blacksmiths, 1; electricians, 1.

Those not accounted for have no occupation indicated.

Females.—The total number of females was 424; those ranged in age from six to sixty-six years. Of this number 231 were married and 134 were single.

Occupation.—These were as follows; Servants, 27; housewives, 18; tailoring, 18; seamstress, 9; necktiemakers, 7; salesladies, 6; shirtmakers, 6; schoolgirls, 5; operators, 5; cigarmakers, 4; workers on white goods, 3; hatmakers, 2; cooks, 2; finishers, 2; midwives, 1; flowermakers, 1; feathermakers, 1; trimmers, 1; workers on furs, 1; cigarettemakers, 1; dressers, 1; milliners, 1.

Those not accounted for have no occupation indicated.

The large number of tailors and those of similar occupation is especially noticeable.

Osteomyelitis.

According to Chas. C. Allison, in the Western Medical Review for September, the treatment which should be employed in any acute case is operative and it should be undertaken as soon as the diagnosis is made. In appendicitis or an acute inflammation involving the gall-bladder this advice has been given, but it is now questioned and even rejected by the best surgeons, in that it cannot apply to every case. But in acute infective osteomyelitis there can be no exception to this rule so long as the patient is not moribund.

We have in this disease an hematogenic infection, which increases under the influence of pressure in something like a geometrical progression, until the system succumbs to the poisoned circulation. Therefore, an incision with trephination of the bone should be done at the earliest possible moment, drainage established, and strong

antiseptics used to impede as far as possible the destructive process already started. Should there be points of tenderness over more than one long bone, each should be trephined and treated energetically with a view to establishing drainage at every point where pressure and cell death are found.

In any case of extensive destruction of the shaft of a bone with sloughing of the periosteum, two methods may be suggested: First, the removal of all the diseased tissue and of all the necrosed bone, that is to say, the accomplishment of a radical operation; and second, of opening the medullary canal and establishing drainage, disinfecting with strong antiseptics, and assisting nature in the reparative process.

The rule which should guide us in deciding upon the operative plan will depend upon the condition of the patient and upon the bone involved.

If the condition of the patient should warrant a radical operation and the destruction of the bone would seem so complete as to offer no prospects of being regained by nature, then the radical operation may be recommended; on the other hand it is better, as a rule, to do the less extensive operation in case a long bone is involved, especially if this be the femur or the humerus, as they have no collateral support.

The operative steps, disinfection and the removal of necrotic tissue, should be supplemented by the immobilization of the part, by a clean surgical dressing, which encourages drainage in the greatest degree (and this the moist), and by general supportive measures, with a view of sustaining the heart during the acute depressing stage of this trouble.

The early recognition of this disease will render amputation unnecessary in practically every case; yet with the process involving first the shaft of a long bone, and second epiphysis, and third the joint proper, there may be so much loss of tissue and erosion of the ends of the bones as to render the member practically useless and amputation may be necessary.

The management of the secondary complications, viz., the localized bone abscess, necrosis, and sequestra, are unimportant, in that there is no actual danger associated with their symptoms, and their removal may be easily accomplished.

Parturition as a Factor in Gynecologic Practice

Parturition is not only a factor, but the principal factor in producing those diseases that call for the interference of the gynecologist, says John Milton Duff in the Jour-

nal of the American Medical Association for August 25th.

He says that aside from inversion of the uterus and fistulas due to pressure, nearly all the morbid conditions following parturition which come to the notice of the gynecologist are primarily due to sepsis, to lacerations or to both combined. And it is impossible to always prevent these, as we cannot always control the environment of the patient, and we cannot be responsible for her ignorance, carelessness or obstreperousness. There is a common idea among the laity that a laceration is always due to the lack of skill of the attendant, but he says that these will occur among the best men. Those who boast of never having a tear have either a very limited practice or they fail to search for the laceration. We should look for them and if found attempt their repair at once.

The day of antiseptic midwifery is past, as its principles are directly harmful. Asepsis is the thing to aim at. Due attention should be paid to the secretions and the condition of the blood previous to the onset of labor if we would avoid infection.

Failing to remove all placental tissue and membranes is a cause of infection and we should carefully examine the placenta to make sure of its complete removal. He says that placenta succenturiata and placenta spuria exist more frequently than is generally believed, and we should be on the lookout.

Ergot after the third stage he condemns as a routine measure, as it is frequently the cause of trouble afterwards.

The too early resumption of household cares and duties after labor should be prevented.

Prolapse of the Uterus in Elderly Women.

According to A. Laphorn Smith, in the *Annals of Gynecology and Pediatrics* for September, a woman suffering from procidentia or prolapse of the uterus out of the body, though not in much pain is yet very miserable.

She is in some danger owing to the cervix becoming ulcerated and the ulceration frequently becoming cancerous.

It is a mistake to think that she is too old to undergo an operation because she is forty-five or fifty or even seventy-five years of age.

Elderly women support these operations remarkably well; they only require from twenty to thirty minutes for their performance; and even if we knew that the patients were only going to live one year afterwards it would be well worth while

operating for the sake of the comfort it affords them.

The operation of vaginal hysterectomy is especially easy and safe in these cases, having not more than one per cent. of mortality and probably not even that,

Ventrofixation gives good results when the uterus is short, but fails when it is long. In some cases the vagina and bladder pull down and elongate the cervix after the fundus has been firmly attached to the abdominal wall.

In either case whether hysterectomy or ventrofixation be employed it should always be followed by an anterior and posterior colporrhaphy.

These patients should remain in bed for six weeks after their operation, in order to give time for the new tissue to become strong.

Pelvic Disease in Insanity of Females,

Eugene G. Carpenter, in the *Journal of the American Medical Association* for September 1st, writes of pelvic disease as a factor of cause in insanity of females and surgery as a factor of cure.

He reports 206 cases operated on out of an aggregate of 2,000 insane females. Of the selected cases we may expect one-third to get well, in unselected cases 5 per cent. will recover.

Inflammatory pelvic diseases promise the best results.

The cases wherein the mental disturbances are associated with the catamenia offer the best possible results.

Operation on the hereditary, predisposed cases, with no local disease, will most probably result in failure, and leave the patient in a worse condition than before operation by hastening an early climacteric period.

The class of cases predominating in different localities differ to such an extent as to probably account for some of the lack of uniformity of results noted by widely separated observers.

After an inventory of the data at hand, it appears that we are justified in the conclusion that pelvic diseases are a factor in the cause, and that surgery is a factor in the cure, of the insane condition. The question now confronting us is what estimate may be placed upon them as factors; as such both evidently have their limitations. The established law of multiplicity and complexity of cause admits few exceptions in singleness of cause. It is important to take the broadest view in the consideration of etiology in insanity. The specialist is too prone to infer the organ of

his specialty to be the source of all other pathologic conditions in the body, when the lesion and the remote symptoms may be but consequential to general conditions. In the consideration of cause in the insanity of females, hereditary predisposition, puberty, the puerperal and the climacteric periods are especially to be borne in mind. In the general physical examination, pelvic disease should always be sought for, and when found to exist should be eradicated. No physician should consent to the commitment of a female until the existing pelvic disease is removed, except under absolute necessity from her mental condition. Upon entrance into an asylum, every female should be examined by a conscientious specialist, and if found diseased, operation should be urged. In brief, the rule of practice should be to give the insane woman the same advantages of treatment as the sane when disease actually exists.

In the absence of pelvic disease, operative procedure as a possible curative factor should be approached with the best judgment and the greatest caution. It is questionable if medical knowledge and experience would justify operating on the defective classes, females at puberty, idiopathic epileptics and those whose insanity is of not over two years' duration. All our asylums have representatives from these classes who have not only been not benefited, but in reality have been made worse by operation. This is the list it would be at least instructive to parallel with that of the cases benefited, before passing judgment on any case to be operated on.

There are patients who may be regarded as non-diseased but operable. These include the hysterical, those especially disturbed at the catamenia, and those in the post-climacteric years. From the first two, some of our most brilliant recoveries have come by the employment of surgery alone. Operation in the post-climacteric period may hasten senility, but is not likely to do much absolute harm.

Perforation in Typhoid Fever from an Operative Standpoint.

G. G. Davis, in the *American Journal of Surgery and Gynecology* for September, reports four cases of perforation in typhoid fever.

Two were operated on and recovered, One operated on and died. One not operated on died.

He says that the diagnosis of perforation is not always easy. A decided and sudden increase, especially in pain, in the abdominal symptoms associated with an abrupt

fall of temperature is diagnostic of perforation.

Leukocytosis is a confirmatory sign.

Hemorrhage is accompanied with a sudden fall of temperature, but not by a sudden increase of abdominal symptoms.

Dullness in the right iliac region is not to be expected in cases of perforation.

Localized impairment of resonance may be due to free abdominal fluid; change of position causes it to disappear.

Localized pain and dullness may be due to a plastic peritonitis around the site of perforation. This may be observed perhaps in one case in ten, possibly one in five.

It is impossible to recognize that a perforation is about to occur. It is not necessary to operate before a perforation occurs, but it is necessary to operate before collapse is marked.

Typhoid fever patients when not in total collapse bear operation much better than was formerly expected.

Patients operated on in marked collapse are liable to die on the table.

Washing out the abdominal cavity with hot normal salt solution, even if no perforation is present, seems to improve the condition of the patient at the time of operation, and to favorably influence the subsequent course of the disease.

Operate as soon as the diagnosis of perforation is made.

It is less dangerous for the patient to run the risk of having an operation done during the first period of depression than to wait and run the risk of having collapse preclude all operative measures.

In operating incise as for appendicitis, and not in the median or semi-lunar line.

The Physiology of Voice Production.

M. A. Goldstein, in the Medical Fortnightly for September 10th, discusses this subject. He says that there are three essential factors in the production of voice: motor force, the vibration element, the resonators.

Of the motor force there are three subdivisions: diaphragmatic, costal and clavicular breathing.

All elements carefully considered, the best form of breathing applicable to voice production and singing is the rational combination of the costal with the diaphragmatic type. Reserve force in breathing is best attained by deep inspiration, fixation of the distended diaphragm and thorax, and control of these muscles while tone is produced.

To facilitate vocalization, the larynx should never be tightly contracted by the

muscles of the throat, especially in the production of the upper registers.

On the resonating cavities, their proper conformation and position in relation to the vibrating cords and larynx depends the quality and timbre of the voice, and the careful and proper placing of tones is perhaps the most essential factor in voice production.

Penetrating Wounds of the Chest.

C. M. Paul, in the Cincinnati Lancet-Clinic for September 8th, discusses the diagnosis and treatment of penetrating wounds of the chest. Free entrance and exit of air from the wound indicates penetration of the wall.

A pneumothorax shows either penetration of the wall or lung, or both. Emphysema will, as a rule, indicate perforation, though there may be exceptions. Free bleeding may mean nothing. The probe should not be used, but the symptoms carefully studied, as its careless use may cause penetration where none exists. Pneumothorax alone or with blood means a penetration of the wall or the lungs, or both. Hemothorax means a rupture of a vessel of the wall or lung. Hemoptysis is a sign of great value and nearly always means injury to the lung.

The mortality of penetrating wounds of the chest is 27.5 per cent. Infection is rarely the cause of death, but hemorrhage is in the majority of cases. He believes that the mortality will quickly drop if we will resort to bolder measures, especially in cases of severe bleednig.

He recommends enlarging the opening to allow the lung to collapse which favors coagulation of the blood, if this does not control the hemorrhage then pack the cavity with gauze.

A number of authorities are quoted in which the expectant plan is recommended unless there are definite signs of continued bleeding, when active interference is demanded.

The Plague in San Francisco.

The fourteenth and fifteenth cases of plague in San Francisco are reported by W. H. Kellogg in the Occidental Medical Times for September. One was a native born clerk, the other a Chinaman.

Glandular enlargements in both cases were found to contain the plague bacillus in large numbers. Guinea pigs inoculated died with typical lesions of plague. The mercantile combination will have to come again.

Roentgen Rays.

In the Medical Record for August 25th, Carl Beck discusses the errors caused by the false interpretation of the Roentgen Rays and their medico-legal bearing.

He says that a distinct skiagraphic plate will always tell the truth. If accompanied by the registration of the details of operation, viz., the source of the current (whether battery, static machine, or street), the length of spark of the induction coil, the intensity of the tube, the distance of the platinum disc of the tube from the photographic plate, the position of the object, the kind of plates, and the time of exposure, it will be a valid document, intelligible to every expert. And together with the anatomical and clinical knowledge of the expert it should be evidence in court.

Reflex Phenomena of Inguinal Hernia.

The symptoms of inguinal hernia are not entirely local, says Evan O'Neill Kane in the Pennsylvania Medical Journal for August.

Prominent among these reflex disturbances is cough, and may be constant and harassing. Three cases are reported of this kind. Colicky pains and more or less severe cramps found in cases were a knuckle of gut gets in the canal.

Symptoms may be referable to the genital organs, the patient believing himself a sufferer from some sexual disorder. Three cases are reported in which this was the case, the symptoms being entirely relieved by attention to the hernia.

Snake Poison.

Gustav Langmann, in the Medical Record for September 15th, writes of poisonous snakes and snake poison. After describing the different kinds of poisonous snakes he takes up the treatment of snake bite. He only notices the more or less trustworthy measures and places Calmette's antivenene at the head of the list as the only reliable antidote.

In a case of snake bite he outlines the following plan of treatment:

One or several tight ligatures should be made above the wound, followed perhaps by deep scarifications; then injection of antivenene, if at hand. If the latter cannot be had, injections should be made of a solution of hypochlorite of lime, 1 to 60, at several points near the bite and elsewhere. Stimulation, if necessary, by either strychnine or atropine or alcohol; hypodermoclysis of physiological saline solution; lavage of the stomach; artificial respiration for

hours; and, not least of all, continuous encouragement of the victim, for a deep mental prostration goes together with the physical depression of the nervous centres.

Surgical Cases.

J. S. Price, in the Texas Medical Journal for September, reports four surgical cases. One of carcinoma of the uterus, for which hysterectomy was done with recurrence after two years. One of depressed fracture over parieto-frontal bones in which an anesthetic could only be used very sparingly. One of ununited fracture of the femur, and one of suppurative appendicitis following scarlet fever, operation and recovery.

The following points were brought out in the report of these cases:

In vaginal hysterectomy, where the uterus is firmly fixed, you will find Bernays' uterotractor of great value.

In those cases where chloroform or ether is contra-indicated, we have a safe recourse in whiskey and morphine with a minimum of either of the anesthetics.

In cases of fracture of the large bones, where there is a condition of impoverished health, we should delay the removal of our dressing. Because the present age is one of operative enthusiasm, and because we are now able to operate with greater safety than formerly, is no reason why every one should follow the example of those most advanced in operative ability. Conservatism is, too, advised.

Finally, among other sequelæ of scarlet fever, we should be on the alert for appendicitis. It is very likely to result from the catarrhal disturbances of the gastro-intestinal tract.

Sarcoma Treated by Injection of Formalin.

John A. Thompson, in the Laryngoscope for September reports a case of sarcoma of the naso-pharynx cured by injections of formalin. The microscope showed the tumor to be a round-celled sarcoma.

Operation could not be done owing to the general condition. Twenty-five minims of a one-half per cent. solution of formalin was injected into the mass twice a week. The injections caused considerable pain, but of short duration.

Six weeks after beginning treatment the tumor appeared less vascular and part of it was removed by post-nasal forceps. The injections were continued, and after a little more than a year the patient appeared well.

Surgical Technic.

Geo. E. Brewer, in the Medical News for September 22d, writes of surgical technic.

To show how this has been improved in the New York City Hospital he makes the following report of the past five years work:

First year, number of operations, 147; deaths, 8; mortality percentage, 5.4 per cent.; infection occurring in clean cases, 39 per cent.

Second year, number of operations, 109; death rate, 8.2 per cent.; percentage of infection in clean cases, 9 per cent.

Third year, number of operations, 165; death rate, 9 per cent.; percentage of infection in clean cases, 7 per cent.

Fourth year, number of operations, 191; death rate, 6.2 per cent.; percentage of infection in clean cases, 8.5 per cent.

Fifth year, number of operations, 168; death rate, 7.1 per cent.; percentage of infection in clean cases, 3.2 per cent.

From these observations, the writer feels justified in stating, in answer to the inquiry made at the close of his first report in 1896, as to how much unavoidable suppuration must be expected in this class of patients, that, if our technic is perfect, none should be expected, and while he is willing to admit that the resistance of these individuals is doubtless greatly reduced, and that visible infections will occur from a very much smaller amount of infective material than in healthy organisms, still by a perfect, though perhaps an exaggerated system of technic, the results at the City Hospital may be made as perfect as those at any other institutions.

Soup Diet in Typhoid Fever.

A. Seibert, in the Archives of Pediatrics for September, advocates exclusive soup diet and rectal irrigation in typhoid fever. Milk, he says, is bad as it feeds the bugs as much or more than the patient.

He claims that by using exclusive soup diet and rectal irrigation the delirium, headache, insomnia, nausea, vomiting and tympanitis usually disappeared within forty-eight hours of treatment.

Tympanitis, nausea and vomiting never developed in any patient, even when complicating pneumonia was present.

The fur on the tongue disappeared within a few days.

Appetite came frequently on the fourth day of treatment, even when the thermometer registered 102 deg. to 103 deg. F.

Even excessive diarrhea (15 to 25 daily

stools) disappeared invariably within the first week of treatment.

In all uncomplicated cases the temperature began to decline within twenty-four to forty-eight hours after the beginning of treatment and invariably would reach the normal figure within ten to twelve days.

In cases complicated by pneumonia, nephritis or phlebitis when treatment began the temperature usually remained in accord with the inflammatory conditions found until these also disappeared, while the cerebral, gastric and intestinal disturbances usually subsided as rapidly as in the uncomplicated cases, excepting anorexia.

Complications, when not present at the start, were very rare and then usually developed within the first two days.

Intestinal hemorrhage was noticed in three cases, none ending fatally. Perforation did not occur.

Serumtherapy in Crupous Pneumonia.

Eighteen cases of croupous pneumonia treated with serum are reported by J. C. Wilson in the Journal of the American Medical Association for September 8th.

Two were women and 16 men, the youngest 15 and the oldest 48 years of age. In three instances there was a history of previous attack. One patient was admitted on the first day, 3 on the second, 2 on the third, 3 on the fourth, 4 on the fifth, 4 on sixth and in one the date could not be determined.

The temperature on admission varied from 101.2 to 105 and there was albuminuria in 15 cases.

Rusty sputum in 16 and purulent in one. The pneumococcus was found in 15.

The quantity of serum varied from 20 c.c. to 460 c.c. and the period of administration extended over a period of six hours to eight days. The age of the serum varied from seven to 53 days. The immediate effects were more favorable and more marked in recently drawn serum than in that which had been drawn for a longer period. After administration there was fall of temperature, less frequent pulse, mitigation of pain and tendency to drowsiness. Several expressed themselves as feeling better after the injection and seemed to be anxious for the time when it should be repeated. There were no effects that could be ascribed to the trikesol present in the serum.

Of the 18 cases, 4 died, a mortality of 22.2 per cent. In two of the fatal cases, 6 and 10, no improvement followed the administration of the serum. In cases 8 and 16, it is noted that slight improvement

followed the earlier administrations of the serum, but that the later injections were without effect.

The defervescence was usually by crisis or rapid lysis. The duration of the attack varied from five to fourteen days, the majority of the cases coming to an end on the sixth, seventh or eighth day.

Of the 4 fatal cases, death occurred in 2 on the fourth day of the attack, in 1 on the fifth, and in 1 on the seventh. In three of these cases, 6, 10, and 16, the patients were alcoholic. In case 8, no information concerning the previous habits of the patient could be obtained. In 6 of the cases that recovered there was a history of habitual excesses in alcohol.

The average duration of the stay in the hospital of 13 of the 14 cases that recovered, was 20½ days, one patient remaining in the ward at time of the writing of the paper.

It is interesting to note that of 20 patients treated in the men's medical ward at the Pennsylvania Hospital during the same period on the general plan, but without serum injections, 4 died, a mortality of 20 per cent. In this series, 8 of the patients, including the 4 fatal cases, were intemperate. No conclusions as to the effect of a plan of treatment can, however, be drawn from a limited series of cases.

Senecio Jacobæa.

According to J. L. Bunch, in the *Therapeutic Gazette* for September, injections of an alcoholic extract of the entire plant of *Senecio Jacobæa* into the circulation of a dog in small doses causes a rise of general blood-pressure, with constriction of the vessels of the intestinal area. This effect is accompanied by a diminution in the magnitude of the contractions both of the auricle and of the ventricle. Large doses of the drug causes a fall of general blood-pressure, with dilatation of the intestinal vessels, and inhibition of the intestinal muscular movements. After several doses, or after one large dose of the alcoholic extract, further injections produce a fall of blood-pressure, with slowing of the heart, and this effect is repeated unless a considerable time is allowed to elapse before any further injection of the drug, which then again causes some rise of general blood-pressure. The entire plant, therefore, contains two substances with distinct physiological actions, but up to the present it has not been possible to isolate these substances. Watery extracts of the residue obtained by evaporating the alcoholic solution produce a fall of blood-pressure and

cardiac inhibition, due to the action of the drug on the nerve terminations in the heart, and not to direct action on the muscular fibers of that organ. The substance which causes a rise of blood-pressure is not contained in such watery extracts, or, if present, only in small quantities.

Scorbutus Infantilis.

Infantile scurvy is a constitutional disease induced by impairment of nutrition says R. B. Gilbert in *Pediatrics* for September 1st.

This condition bears some resemblance to rickets or it may be mistaken for purpura hemorrhagica.

The infant affected with scurvy is anemic and flabby. After the disease is established, the child manifests pain on handling and excessive tenderness on moving the limbs. It will lie for hours in its cradle without trying to move, and when approached it cries out for fear of being handled. The manipulation necessary in changing the napkins causes the infant to cry piteously.

Fusiform swellings along the thigh or leg indicate subperiosteal hemorrhage, and it explains the great pain caused by handling the limbs. It may be remarked just here that these symptoms are often misleading to the casual observer, and these cases are often diagnosed as rheumatism.

Hematuria and intestinal hemorrhage may occur. The temperature continues nearly normal, the urine rarely contains albumin.

Two cases are reported both recovering promptly under proper treatment which consists in changing from artificial food to fresh cow's milk, beef juice, mashed potatoes with butter and the juice of two sweet oranges daily.

Traumatic Insanity.

E. G. Carpenter, in the *Journal of the American Medical Association* for September 8th, reports a case of traumatic insanity in a man, 39 years of age, who was struck by an electric car.

From a study of this case he endorses the conclusions of Duret that the dura mater is abundantly supplied by sensory nerves from the fifth pair, by anterior, middle, and posterior branches. He suggests the possibility of special terminal organs, which increase the delicacy of the sensibility of the membrane and account for the marked "physiological" troubles ensuing on their irritation.

That irritation of the dura mater, especially of its inner surface, causes pain.

That irritation of its nerves causes reflex movements in both voluntary and involuntary muscles, but not so local or definite as those caused by irritation of the cortex. They are not more localized than those caused by irritation of peripheral sensory nerves.

His cases of purposely-produced depressed fractures of the skull in animals showed all the reflex results, as of irritation of the dura mater, both on the same and on the opposite side; and not as of direct cortical irritation. He made this clear by finding, post-mortem, the cortex uninjured. If a superfluous amount of violence was used, the symptoms were rather those of cerebral commotion.

That the secondary contractures, which follow injury, are due to dura mater reflexes, appearing almost indiscriminately on the same and opposite sides.

That reflex vasomotor disturbances are also the result of irritation of the nerves of the dura, consisting in spasm or paralysis of cerebral and ocular vessels, and that light is thus shed on the causation of secondary effects of cerebral traumatism, through the agency of cerebral vascular conditions.

Puerperal Eclampsia.

John F. Moran, in the American Journal of Obstetrics for September gives some statistics of Columbia Hospital in regard to puerperal eclampsia.

In 4,200 labors there were 48 cases of eclampsia; 12 mothers died—25 per cent.; 49 children (twins once); 13 still-born (3 putrid); 41 complete histories showed 35 primiparæ—80 per cent.; 28 patients admitted in labor; 38 cases were vertex presentation, 2 breech, and 1 face; the eclampsia occurred in 20 before labor, 13 during labor, and 8 after labor; the greatest number of convulsions in any one case recovering was 49; in 27 cases the resources of art were used as follows: 1 extraction (breech case); 4 manual dilatation of the cervix; induction of labor, 1; forceps, 15; venesection, 6.

He says that no one line of treatment has been pursued in the Hospital. In addition to the administrative treatment, chloral and morphine have been most frequently used. During the past six years veratrum viride has been given in a number of cases, but it was not pushed to the limit recommended by some authorities. As regards the obstetrical management, it has been customary when the cervix was yielding, and medicinal measures failing to control the convulsions, to accelerate delivery with forceps.

From the foregoing evidence it would seem that the most rational and efficacious treatment of eclampsia lies in prophylaxis. When we contrast the great mortality to both mother and child, under all forms of treatment for convulsions, with the excellent results obtained from judicious management of impending eclampsia, we forcibly realize the truth of this statement.

Paralysis.

D. Campbell Myers, in the Canadian Practitioner and Review for September, reports an unusual case of paralysis in a man 66 years of age. Previous history unimportant except a severe attack of grippe in 1892, in bed four months, the symptoms being chiefly nervous.

The present illness began suddenly with complete loss of power in the right arm, which lasted for a day or so, and then passed off, when it was found that he had complete left facial paralysis which was accompanied by herpes zoster in the post cervical region on the left side, in a line with the upper border of the trapezius. The angle of the mouth is drawn to the right when he attempts to show his teeth. He is unable to close the left eyelids. When he closes the right lids the left remains wide open (lagophthalmos). The wrinkles on the left forehead are absent, while those on the right side are more marked. (Note the importance of these two). Movements of the eyes are good, and the pupils normal. No paralysis of the tongue, which is protruded in the median line. He says that food lodges in the left cheek, and to a less extent in the right. There is no interference with secretion of saliva. Taste is unaffected, and there is no affection of the soft palate. An examination of the optic discs with the ophthalmoscope shows them to be normal, and there is no marked contraction of the field vision. There is no disturbance of the sensibility anywhere. The paralysis is complete to emotional as well as to voluntary movement. Speech is affected from the imperfect articulation of the labial consonants.

In regard to the right arm, while the movements are all performed quite well, the muscular power is less than in the left, as shown especially by the dynamometer, which in the right marks 80, while in the left 100.

The knee jerks are active and equal, and the wrist jerks the same.

The electrical reactions show that the left facial nerve has a quantitative change, this nerve being more excitable than the

right. The muscles of the left face reacting well to a slowly interrupted faradic current of less intensity than that necessary to produce a like reaction in the muscles of the right side.

In considering the location of the lesion the author concludes that one lesion alone would not account for the crossed symptoms, and so he believes that there were two lesions, one cortical and the other peripheral.

The former, he thinks, was in the median parietal branch of the left middle cerebral artery supplying the arm center of the left Rolandic area and that the latter was an affection of the nerve trunk.

The patient entirely recovered in five weeks.

Pott's Disease.

Edward H. Bradford and F. J. Cotton, in the Boston Medical and Surgical Journal for September 20th, take up the treatment of Pott's Disease after the development of the deformity.

In speaking of the correction of the deformity, they say that pressure is better than traction and a number of experiments quoted to show this.

In regard to operative measures it has been shown that the main support in the diseased spinal column is in the articular processes. Where these are welded together in connection with an ankylosis of the transverse and spinous processes, nature has furnished the most desirable support to a spinal column with diseased vertebral bodies. Attempts to promote solidification of these tissues naturally suggest themselves, but these can hardly as yet be said to present an established method of treatment.

The question of laminectomy for paralysis, as well as that of operative treatment for abscesses or vertebral sequestra, are not considered as coming within the scope of this report.

In conclusion, they stated that the correction or rectification of the curve in Pott's disease is to be considered in every case of active disease with a deformity. The employment of force should depend on the pathological conditions and not on the extent of the curve. Force should be used with great reserve. Improvement of the curve is to be considered in every case, and is to be attempted wherever the spinal column can be made straighter without great force. The main dependence, however, for an ultimate success remains in the surgeon's careful, continued, and thorough employment of retention appliances which

hold the spine in the straightest possible position for a sufficient length of time for consolidation of the diseased bony structures. Success is to be won more by careful attention to detail than by an operative attempt.

Simple Fractures.

In the St. Louis Medical Review for August 25th, Thomas H. Manley writes of the prophylactic measures and precautions to be observed after simple fractures, with a view of obviating such degenerative lesions as may arise in consequence of injuries of the arteries or circulatory apparatus.

In fractures of every description which involve the shafts of the long bones or joints of the extremities, our first and most important concern is the preservation of the circulation.

In open fractures associated with an extensive laceration of the blood-trunks, after the parts have been rendered aseptic, in the primary dressing for local hemostasis, moderate tamponage with gauze, with moderate bandage pressure, will generally suffice. But when the larger arteries are lacerated and it is important to immediately reduce the onflow through the main arterial trunk, the tourniquet properly adjusted is to be rather relied on.

The Esmarch bandage, because of the pain attendant on its use and its great constricting power, should not be indiscriminately employed; not under any circumstances over a period of more than two hours. Its use is attended with greater danger than any other hemostatic agent in severe lesions of the arteries associated with a shattering of bone and laceration of the soft parts.

The main arterial trunks may sustain varying degrees of damage in so-called simple fracture, thereby threatening the vitality of the parts beyond. In all these cases, our attention should first be directed to placing the limb in such a position and under such conditions as will best favor a full re-establishment of the circulation and the preservation of the limb's vitality, irrespective of what the precise state of the bone may be.

As the vitality of a limb after a serious fracture, with a thrombosed state of an arterial trunk, depends on the prompt establishment of a collateral and peripheral circulation, restraining splints and bandages must not be applied until we are assured that the temporary asphyxia, or suspended state of animation of the limb, has passed off, and the normal heat has returned; in

the meantime depending on posture muscular relaxation and the application of artificial heat to aid in reanimation.

As dry gangrene is the type of molecular death which follows in the wake of aseptic thrombosis of the chief arterial feeders, with precautions to preserve the surface aseptic, the parts desiccate up to the line of demarcation; putrescent mortification is wanting; hence there is no haste to amputate till the processes of nature have clearly defined the limitations of decomposition and the area of living parts. A primary amputation here then should never be permitted in civil life.

As there are good reasons to believe that the union of fractured bones is sometimes delayed, or even wholly arrested, by the premature or a too rigid adjustment in fixative apparatuses, in consequence of them being too long employed, caution should be observed not to unduly constrict the circulation by any sort of mechanical appliance; rather, on the contrary, it is probable that in not an inconsiderable number of fracture cases the circulation of the limb is favored, the nutrition improved, reparative osteogenesis hastened and perfected by occasional moderate motion, massage, and only such an adjustment as will provide support alone to the limb, without simultaneously exerting too much pressure.

Surgery and Diabetes.

C. P. Gildersleeve, in the Journal of the American Medical Association for September 1st, has the following rules in regard to operating on diabetics:

He would not operate on any patient suffering from diabetes without first explaining either to the patient or some one in authority the possibilities which might follow.

He would refuse to operate on an elderly diabetic subject for any of the simple affections, such as benign tumors, etc., unless there was some special reason for operating, and it is certainly a good rule to always examine the urine in any case of gangrene occurring in elderly people.

In the painful, rapidly-spreading gangrene which often occurs in these cases, and which is bound to cause their death if left alone, he believes in prompt and high amputation. As a rule, he waits until a line of demarcation forms; but in some cases, although the line has not formed, one can judge fairly well about how high it is going by the appearance, and in such a case he would operate before the line had actually formed. Some of these cases are inoperable; they may have complete gan-

grene of the foot, and the leg may be in good condition. Again, the leg may be indurated and boggy, and this condition may extend as high as the knee or above it, and it would be poor judgment to operate on such a case. Another class of cases is the dry, comparatively painless gangrene which often affects the toes in these patients. These cases will often run their course and be cast off, and as a rule they should be left alone, so far as operations are concerned.

Furuncles frequently occur in diabetic patients. The furuncles will usually succumb to the general treatment for diabetes. In the case of carbuncles, however, surgical treatment such as hot applications and the knife at the proper time are required.

Shall we tell Women with Uterine Cancer the Nature of their Disease.

This question has been considered by all at one time or another and we are prone to answer it in the negative. We tell her friends or the consultants, but we naturally shrink from telling the woman of her doom.

According to A. Laphorn Smith, in the Canada Medical Record for August, we should tell the patient every time and in all stages. In the beginning, because we want her help in complete removal of the organ, in the invasion of the cervix, because we can relieve her suffering by the curette and cautery and even in the last stages, because it is always best to tell the truth.

He says we should never tell the friends, tell the patient and if she wants to tell her friends then it is all right, but let the confidential relation be with the patient and not with others. In the early stage of cancer of the uterus we must tell the patient or she will not be disposed to consent to a major operation for a simple ulceration. In all cases we should endeavor to secure and maintain the implicit confidence of the patient by honest dealing, it is best for her, it is best for our own reputation.

Sympathetic Inflammation of the Eye.

Melville Black, in the Colorado Medical Journal for August in discussing injuries to the eye from accidents in the mine, says that in sympathetic inflammation the treatment is first of all the removal of the injured eye which is causing the trouble. The exception to this rule is when the offending eye has a fair degree of vision and the case has not come for treatment until the fellow eye is well advanced in the sympathetic inflammatory process. In such a case it is improbable that removal of the offending eye will stay the process in the

sympathizing eye, and if it does not the patient is doomed to blindness.

A hard and fast rule can be laid down to *remove all offending eyes that are sightless.*

The management of a case of sympathetic inflammation consists in the use of inunction of blue ointment (Ung. Hydrarg.) one drachm daily; internally iodide of potassium in increasing doses, beginning with five grains and carrying it up to the limit of tolerance, then beginning again with the initial dose; pilocarpine sweats once daily. Dr. Harold Gifford recommends 150 to 200 grains of sodium salicylate as the daily dose, to be continued so long as improvement of the disease continues, or until resolution is accomplished. He has had some very brilliant results from this treatment. Locally, hot applications ten minutes out of every two hours; atropine at first every five minutes for one-half hour, then every three hours; leeching from the temple and ocular side of the nose to be repeated every second day.

The continuation of such heroic treatment must depend upon the judgment of the physician. If the eye improves, keep it up. If it does not improve after a fair trial, it is useless to continue it.

Tuberculosis of the Testis.

Alex. V. Maschcowitz in the Medical Record for September 15th, discusses the radical treatment of tuberculosis of the testis. This includes (besides extirpation of the testis), extirpation of the entire vas deferens together with the corresponding seminal vesicle.

He recommends the following method: Castration is performed by the usual method and through the usual scroto-inguinal incision, with the exception that the vas deferens is primarily not divided at the level of the vessels, but is carefully isolated from the other structures of the spermatic cord and left in connection with the testicle; then as much of the vas deferens is pulled out of the inguinal canal as can be done without running the danger of tearing it off. After placing a ligature around it, it is divided, and the proximal end is carefully seared with a Paquelin cautery, so that in the subsequent manipulation no opportunity shall be given for any exuded material to infect the channel of the vas deferens, between the peritoneum and the bladder. After removal of the testicle the external incision is closed, with or without drainage, depending upon individual cases. The patient is then placed in the lithotomy position, a sound is introduced into the bladder to serve as a guide, and a curved in-

cision is made in front of the anus, extending from one tuberosity of the ischium to the other—the so-called prerectal incision of Zuckerkandl, or, more preferably, Kocher's "pointed arch" incision; after division of the superficial and deep perineal fascia, and of the tendinous union between the bulbocavernosus muscle and the external sphincter of the anus, the urethra being held to the front by a blunt retractor, the space between the rectum and urethra is deepened by blunt dissection, until the levator ani, or more particularly its anterior portion, the so-called levator prostatae, is reached. This is then divided by a pair of scissors, the divided muscle retracts, and the prostate and the diseased seminal vesicle are reached by the palpating finger. The finger of the left hand is now introduced into the rectum, and hooked over the upper border of the prostate; traction is exerted, and it is surprising how much of the prostate and seminal vesicle can thus be brought into view. Should this, however, be impossible on account of adhesions, the seminal vesicle may be grasped by a clamp and gentle traction and manipulation may then be made to liberate it further. Proceeding in this manner, the entire unruptured seminal vesicle and the remaining portion of the intra-abdominal part of the vas deferens are brought into view (that the entire vas deferens is being extirpated can be recognized by the attached ligature and the seared surface). The seminal vesicle and vas deferens are by this time attached only by the ejaculatory duct, which can be readily cut off. Tamponage of the wound, and possibly the insertion of one or two sutures into each angle of the perineal incision, terminate the operation.

Traumatic Neuroses.

Arthur Dean Bevan in the Journal of the American Medical Association for September 22d, writes of traumatic neuroses from the standpoint of the surgeon. From a study of 200 cases he concludes that real injuries of the nervous system present positive and immediate symptoms.

Those alleged injuries of the nervous system, without positive and immediate symptoms of gross lesion are either cases of malingering or normal cerebral states, traumatic neuroses, or a mixture of the two.

Traumatic neuroses are the result of two factors: 1, a brain readily affected by suggestions; 2, suggestions furnished by an accident with or without injury to the individual, suggestions furnished by sympathetic care or a craving for sympathy, and

lastly of greatest importance, suggestions, furnished by medical attendants.

To establish a diagnosis requires the immediate and sometimes protracted observation of the patient as in the study of any psychosis. The supposed refined means of diagnosis, as the dynamometer, esthesiometer and electricity, are seldom of value and are often of positive harm as suggestions to patient.

These cases recover rapidly under proper surroundings and advice when the continuing causes are removed. Recovery may be indefinitely postponed under improper surroundings and advice.

No secondary degenerations of the nervous system follow traumatic neuroses. The pathologic conditions due to an old standing traumatic neurosis are the degenerations of disuse and the general deterioration of the individual from confinement, lack of exercise, dejection, etc.

The subject of traumatic neuroses will not receive its proper place until the medical profession recognize their responsibility in the development and continuance of these conditions and until proper means are provided for the punishment of malingerers and their alleged medical experts.

After definitely establishing a diagnosis, we should handle these patients without gloves. Have a frank, honest talk with the patient alone. Tell him to throw away the crutches, to go back to work. If the general condition is bad give him a few weeks, or even a months, of exercise, and possibly change of climate. Tell him that there is nothing the matter with him; that the trouble is imaginary, is in his head and not in his feet or back: that if he will believe you and make the effort he will be perfectly well in a short time. Tell him that the constipation and hemorrhoids, the headache and tired feeling are due, not to the accident, but to his voluntary confinement. Outline definite course of treatment to be followed, a cold bath in the morning and exercise at certain definite times during the day.

If you handle your patient in a perfectly frank, open way, one or two things will happen. You will either cure him at once or prevent the development of the condition, if you see him early enough, or he will go to some other physician. If the other physician is as well posted and honest as you are and gives the patient the same advice, and if all the physicians consulted by these cases handled them in the same way we should hear very little of traumatic neuroses.

Trachelorrhaphy.

P. C. Palmer, in the Medical Herald for September, describes a new method of operating for lacerated cervix.

He uses rings of various sizes made to fit snugly over the cervix. After the usual preparation the suture is introduced through the anterior lip at the junction of the vaginal wall and cervix from before backward and carried down sufficiently far to allow it to be thrown into the open eye of the needle, it is then drawn out with the lower end protruding through the os externum. In the same manner it is introduced into the posterior lip.

The ring is slipped up around the cervix and over the two sutures which are tied after crossing them in the cervical canal. The ring is firmly held in place by the sutures and the uniform pressure made upon the entire circumference of the cervix holds in exact coaptation the freshened surfaces.

In cases of multiple lacerations one suture is placed in each lip as described above.

To allow for swelling the ring may be made of spiral flattened wire and covered with rubber.

Other material, as hard rubber, silver, aluminum, may be used for the ring.

Tuberculous and Purulent Joints.

A. M. Phelps, in the New York Medical Journal for September 15th, concludes his report of 70 cases of tuberculous and purulent joints treated with large glass drainage tubes and pure carbolic acid. This treatment has given him the very best results in these cases, and out of the 70 cases it was necessary to do an excision in only 20 cases.

His method is as follows:

The abscess cavity is laid open. The opening into the capsule is found and enlarged and the joint explored. If there is extensive bone disease, the incision is lengthened and the capsule of the joint freely divided for half or two-thirds of its entire circumference, the head of the bone pulled out from the socket, the curette freely used, and the joint thoroughly irrigated with bichloride solution, one to one thousand.

The joint is now filled with pure carbolic acid. It is allowed to remain one minute by the watch, after which the joint is thoroughly washed out with pure alcohol, and finally the alcohol is washed away with a two per cent. solution of carbolic acid.

Instead of packing the wound or sewing it up, or introducing the collapsible rubber drainage tube, use the largest glass tube that the cavity will take, which extends down to the joint and is just flush with the

skin. This tube not only admits of perfect drainage, but enables the surgeon to see, day after day, just what is taking place in the joint. If further suppuration or extension of disease takes place, it is usually treated through this large glass tube by cutting and the use of carbolic acid and alcohol. Packing can be introduced through the tube to secure perfect drainage from the joint. These tubes vary in size from half an inch to two inches and a half, and they are of various lengths. A drainage tube for a small child should be about an inch in diameter. In other words, the glass tube is fitted to the parts, as large as they will take, and one can readily see the immense advantage the surgeon has day after day if he can examine the diseased area down to the very bottom of the joint. The tube is worn until granulations fill in from the bottom of the wound.

Trauma as a Cause of Nervous Disease.

Charles W. Burr, in the course of an article on this subject, in the *Journal of the American Medical Association* for September 22d, says that the two great functional nervous diseases, that is, the two great diseases of unknown morbid anatomy, are hysteria and neurasthenia. Both frequently follow an accident, are much more frequent in adults than in children, and are sometimes quickly recovered from after a legal settlement is made. Both are sometimes pretended fraudulently to exist. That they may be caused by trauma is admitted by all competent to have an opinion. Concerning the manner of causation we have much to learn. It is certain that there is no lesion in hysteria discoverable by our present means. It occurs practically only after accident in which there is an element of fright, and sometimes, indeed not infrequently, there is no physical injury at all. It is curious that physical injury is rarely followed by hysteria, and it occurs very rarely after grave surgical operations. This is not explained by saying that severe injury insures against hysteria. The probable explanation is that there must be time enough for the patient to perceive the horror of the accident while fully conscious. Drunken men and little children almost never get traumatic hysteria, and patients go to operation reassured that no evil will result. A strong effort has been made to group together certain symptoms, some hysterical, some neurasthenic, under the title of the traumatic neurosis. It is doubtful if this serves any good purpose. Hysteria and neurasthenia, following accident, differ in

no way from the same diseases when caused by other agencies.

Another disease of unknown pathology which frequently follows accidents, with or without physical injury, is paralysis agitans. Mere tremor is, as one may say, a physiologic sign of fright, and usually soon ceases, but occasionally it persists without the addition of any other symptom. Sometimes there are added, in slow progression, all the symptoms of shaking palsy. The tremor may appear first in the injured extremity if the trauma has been a local one.

Tuberculosis of the Kidney.

C. S. Evans, in the *Cincinnati Lancet-Clinic* for September 1st, in discussing this subject gives the following diagnostic points:

The frequent micturition.

Limpid polyuria.

Pyuria, spontaneous and persistent.

Hematuria, slight, and repeated capriciously.

Renal tumor.

In young, pale, somewhat feeble subjects we have practically three types:

1. Patient has hematuria alone.

2. Patient has hematuria and pyuria.

3. Patient has tumor alone.

1. Hematuria. The peculiarities of hematuria due to renal tuberculosis must be borne in mind as they have been given. In tumor much more abundant. In stone, due to exercise and controlled by rest in bed. Frequent micturition, pyuria, albuminuria and tuberculosis elsewhere, either in genito-urinary tract or any place else in the body, make the diagnosis possible.

2. Patient has pyuria and hematuria; this usually follows the hematuria and the limpid polyuria. The characteristics of the pyuria are those of a pyelo-nephritis. To determine that it is tuberculosis:

(a) Presence of bacilli tuberculosis.

(b) Presence of tubercular foci elsewhere, especially of bladder around the opening of the ureter.

(c) General condition.

(d) Absence of antecedent infection.

3. When tumor alone exists, then the diagnosis is alone possible when other foci are to be found or when the bacilli tuberculosis can be demonstrated in urine or in fluid obtained by puncture.

The disease is rarely confined to one kidney, hence the difficulty in treating it as a malignant disease. Every interference means early diagnosis. Between nephrectomy and nephrotomy the choice depends upon (1) health of the other kidney; (2) general condition of patient.

Trophic Changes in Consumption.

Henry Herbert writes on this subject in the Medical News for September 8th. He does not think much of the hereditary theory, but that undue exposure is the only source of consumption. When the disease runs in a family it only shows that the disease is easily transmitted by intimate domestic and social relations.

The pathologic basis for the term "habitus phthisicus" is formed by changes in the skeleton, the etiology of which can be traced back to the scrofulous era. Strophies of single bones have been described, but they do not show any signs of phthisis particularly, except that they are apt to occur primarily in the ribs. The following are significant factors: Rapid growth of bones, ossification of the costal cartilage, disproportion between the width and depth of the thorax to its length, prominent angulus Ludovici, narrow scrobiculus cordis. Among the unilateral symptoms may be included scoliosis, depression of one shoulder, a wing-like protrusion of one scapula; the latter caused by atrophy of the musculus serratus magnus. Regarding the proportions and deformities of the chest, they do not occur in adults with a normally developed skeleton, except scoliosis, and if we do observe it in such individuals we may safely assume that they had acquired such "thorax paralyticus" through tuberculosis in infancy or earlier childhood. Good muscular stratum and a strong panniculus adiposus may easily cover those abnormalities.

He relates a few cases showing the curious coincidence of the side on which the trophic signs occur and that in which the lung is diseased.

This paper brings out the possibility of recognizing the early and latent stage of consumption sooner than with the present means or methods, by ascertaining in acute cases the side affected. If both sides are affected these signs make it possible to ascertain the side primarily affected on account of trophic disturbances on that side and in cured cases to diagnosticate the location of an absolute phthisis.

Urticaria.

Herbert T. Webster, in the American Medical Journal for September, reports a dead-sure remedy in urticaria and hives.

The specific indications as he calls them are—"a disease characterized by those elevations on the skin called wheals. They have a white top, and are often surrounded by a diffused redness. They excite intolerable itching, especially when the person is

warm in bed. The eruption frequently comes and goes once or twice in twenty-four hours, and is dependent upon derangement of digestion."

The specific remedy is carbonate of potassium, which he says will cure promptly in a few hours.

The prescription is simple. Add ten or fifteen grains of kali carbonicum to half a pint of water, and order a teaspoonful every hour until relief follows. Three or four doses a day for a day or two afterward may be required to confirm the cure. The size of the dose does not matter so much, so it is small enough to insure immunity from unpleasant drug action, and large enough to produce slight therapeutic effect.

Ventral Hernia.

M. M. Johnson in the Medical News for September 1st, describes an improved technic for the cure of ventral hernia.

He says that they may be considered as median and extramedian. The former following median abdominal incisions; the latter resulting mostly from operations for appendicitis.

An elliptical incision is made a little within the border of the opening in the abdominal wall. This must be done carefully, as there is frequently a loop of intestine adherent to the inner surface of the hernial sac. The skin and superficial fasciæ (if they can be distinguished) are then dissected back, exposing the sheath of the rectus muscle. On the outer side a similar dissection is made an inch or more over the external oblique. The edges of the opening are trimmed and a No. 25 silver-wire suture is inserted at the upper angle of the opening by lifting the abdominal wall and passing the needle through the peritoneum, rectus muscle and skin, about one inch from the free border of the opening. The needle on the other end of the wire is similarly passed through the abdominal wall on the opposite side. Silver-wire sutures are inserted at intervals of one inch throughout the entire length of the incision. All the subcutaneous tissues are then united by a continuous kangaroo-tendon suture, and the skin is closed by a continuous suture of the same material.

The deep wire sutures are now taken up one by one, moving them back and forward, to make sure that a loop of gut is not included between the wire and the abdominal wall. The ends of the wire are wound around a piece of ivory on either side and drawn sufficiently tight to relieve the tension on the kangaroo-tendon stitches. This is the old and nearly obsolete "quill

suture" used for a new purpose. Half the wires are removed in ten days and the remainder in ten days. When the hernia is in the median line the principle is the same. The object is to relieve the tension on the stitches which hold the muscular tissues together until firm union has taken place.

White Swelling of the Knee.

R. W. Townsend, in the *Journal of Medicine and Science* for August, in discussing the operative treatment of white swelling of the knee, says that mechanical treatment was, as a rule, so successful that operations were rarely necessary if the treatment was begun early. Ligaments and soft parts, when much diseased, should be removed by arthrectomy, free incisions being made, sometimes on both sides of the knee, with the simultaneous removal of the diseased bone by the curette. The results of arthrectomy were very good and a movable knee should be expected. The excision of sinuses was probably the easiest way to get rid of them. The more complete operations of excision and amputation were rarely indicated. The former should rarely be done in children, because it was likely to be followed by flexion or knock-knee, and because the inevitable shortening would be excessive when the patient grew up. In a very bad case excision did not go far enough; in a mild case it was too radical. Amputation at the lower third of the thigh was a recourse in sepsis when the removal of all damaged tissue by arthrectomy or excision was impossible.

An abscess as soon as detected, should be cleaned out and, if possible, the diseased focus in the bone removed by the curette. Many patients would thus be saved from sepsis and a movable joint be secured, instead of a stiff one. Thorough aseptic precautions should be observed, and communication of the abscess with the joint cavity should be avoided in operating and spontaneous communication prevented by operating early.

A septic joint should be freely evacuated and, as a through and through drainage was often unsatisfactory, an incision should be made across the knee in front and washing out conducted after lifting up the patella. Amputation might thus be avoided in cases of streptococcus inflammation. If this failed, resort might be had to amputation. In a boy, age nine years, who was thus treated, amputation soon reduced the pulse from 148 to 112 and the temperature from 104 deg. to 98.5 deg. and healing by first intention and perfect recovery followed.

The Leading Editorials of the Month.

Medical Missionaries in China.

According to the Medical Standard, whatever may be the opinion of any individual as to the desirability of missionary enterprises in China and their bearing upon the present terrible condition which prevails in that unfortunate country, there can be no question as to the value of the noble and unselfish work, performed by the medical men and women, so many of whom are now, we fear, giving up their lives in their devotion to Christian evangelization. The first missionaries to do medical work were the Jesuit priests sent out by the Catholic church. These worthy fathers often ministered to the needs of the body while pointing out the necessities of the soul. Our materia medica has been enriched by several important drugs at their hands, including cinchona bark and ipecacuanha.

In this branch of missionary work America has always taken a foremost part. The first physician to be sent to a foreign field was Dr. John Scudder, who went to India in 1819, where he remained until he died in 1855. The first medical missionary in China was another American, Dr. Peter Parker, who arrived in Canton October 26, 1834. Of him it was said that "he opened China to the gospel at the point of the lancet." It was not, however, until about 1876 that the value of medical missions was fully appreciated. Among the leaders in the movement instituted at this time was Dr. William H. Thompson of the University Medical College, New York, who established a number of scholarships for young men expecting to devote themselves to this work. During the past few years the movement has gained in strength and there are, as a consequence, in the neighborhood of two hundred and fifty physicians in China alone, who devote themselves exclusively to missionary work. They have organized medical societies and published at Shanghai an ably conducted medical journal.

We hear much to-day of the advanced state of Chinese civilization. This certainly cannot be applied to medical matters. Their knowledge of anatomy is purely theoretical and exceedingly rudimentary. It is said they place the seat of the intellect in the stomach, of course in the liver and believe that the mouth communicates directly with the bladder by means of a tube. A system of therapeutics that depends for its results upon such remedial agents as tiger's teeth and rabbit's dung can not, by any construction, be regarded as "advanced." Nor

can that conception of human relationships be considered a high one, which leaves the sick unnursed, abandons the wounded to die on the battlefield and throws the dead child into the street to be devoured by dogs.

The Chinese have been generally quick to take advantage of and appreciative of the services of western medical practitioners, even when other missionary workers have excited among them only hatred. As Dr. Maxwell says: "Again and again the lives of valued missionaries in China have escaped destruction at the hands of evil and fanatical mobs, just because they were providentially recognized to be friends of and assistants of the missionary doctor." We have to be proud of our medical confreres in China both as physicians and as men and women. We shall hope for an early renewal of their valuable labors.

The Causes and Treatment of Movable Kidney.

The term "movable kidney," as applied to a pathological condition, implies that the organ in its natural state is more or less fixed says the *Therapeutic Gazette*. This is scarcely correct, since Albarran has shown that the normal range of vertical motion in the healthy organ varies from one to two inches.

Moullin (*The Lancet*, May 5 1900) considers the failure of the kidney to reascend upon tranquil expiration a satisfactory test of normal ability, even though the kidney comes down only low enough to enable its inferior extremity to be felt. When the patient is standing upright, even though the kidney descends upon inspiration so as to bring one-half of its substance within reach, he does not regard this degree of motion as pathological, provided the organ recedes as soon as the tension of the diaphragm is relaxed, since the kidney still retains its normal relation to the diaphragm, the movement of the one following that of the other. This test will not answer if the patient be lying down, since even a greatly displaced kidney may slip back again into a bed, of its own weight.

The kidneys are held in position, partly by the pressure of the subperitoneal space, partly by the shape of the recesses in which they lie, and partly by the investing connective tissue.

Moullin states that in a very large number of cases of movable right kidney there is a definite flattening of the right lumbar region, which, of course, cannot possibly be due to malposition or even to absence of the right

kidney, since absence of this organ can have no effect upon the contour of the back. This flattening is a sign that the vertebræ have undergone a certain degree of rotation, and indicates the cause of the displacement of the kidney, not the consequence of it. The disease is hereditary and common, and it is in men, and in women who have born children more than in those who have not. It is also at least twenty times more common upon the right side than it is upon the left.

As to treatment, Moullin believes that the general muscular development, especially that of the abdominal wall, should be encouraged as much as possible. Too much must not be expected from this, since nephroptosis may occur in strong individuals, and does not necessarily follow even when the abdomen is pendulous and absolutely devoid of tone. Overuse of the right hand and arm should be checked, especially where the disease is hereditary. Tight corsets and high heel should be discouraged, though Moullin does not attach a very great amount of influence to either of these. A patient should not be allowed to get up too soon after parturition. When the kidney has become unduly movable, it does not necessarily excite symptoms, perhaps not in the majority of cases. Even though it occasions no distress, operative measures should be adopted, since such an organ is constantly in danger from congestion or ureteral obstruction.

The choice, Moullin holds, lies between wearing an abdominal belt and nephrorrhaphy. The former method of treatment, if combined with massage and exercises, may be successful in milder cases. The service of the belt is to restore the abdominal pressure upon which the kidney is in part dependent for maintaining its position. The addition of a pad to the belt is perfectly futile. It is impossible to so adjust it that it will press the kidney back. When there is manifest deformity of the lumbar region, or in the absence of this when the patient is more or less crippled by constant or recurrent attacks of pain, associated with movable kidney and distressing symptoms, nephrorrhaphy should be practiced. Moullin states that he has never known it to fail when properly carried out, if the symptoms have not already lasted so long as to produce an indelible impression upon the patient's nervous system.

As to the method of performing this operation, that which has given the best results is dependent upon stripping the capsule throughout the greater length of the dorsal surface of the kidney and securing the parenchyma thus exposed to the ab-

dominal muscles posteriorly, with catgut sutures; thereafter keeping the patient flat upon his back for a period of three weeks. The other method, of securing the kidney posteriorly by strips of gauze passed around it above and below the pelvis, is a more difficult and dangerous procedure, and has not shown results which make it a method of choice.

Not a Regular Physician.

So long as there are people in the world who live by turning a dishonest dollar, so long will the life insurance companies have their share of troubles says the Chicago Clinic. The old line companies are very careful to pay out death benefits only on positive proof that the assured persons are dead. This extreme caution, which sometimes seems to the uninitiated unnecessary, they have learned to exercise from having had frauds practiced upon them in the past. Some of these frauds, and attempted frauds, evince wonderful criminal cunning, and read like a chapter from Vidocq. At present, however, those who attempt to defraud an old line company are very likely to get themselves into trouble, and ultimately, into the penitentiary.

The fraternal companies, however, constitute a more fertile field for the criminal activity of those who are dishonestly inclined. These companies profess to determine that an applicant is an honest, reputable member of society first, and that he is a good life risk afterward. Thus they reverse the erstwhile business axiom that every man is to be considered dishonest until he proves himself honest, for they accept every member as honest until he shows himself otherwise.

A fraternal order, "The Knights and Ladies of Security," doing business in Chicago, seem to have been defrauded out of a large sum of money by the dishonesty of some of its officers and members. One, Mr. O'Grady, was duly initiated into the order, and an insurance of \$1,900 placed on his life. Mr. O'Grady was old and very feeble in health. In fact, his condition was such that an old line company would not have carried his risk over night. But under the fostering care of the Soldiers' Home at Milwaukee he managed to hang on to life. In fact, he hung on so long that they could not wait any longer. So a body was procured under the plea that it was wanted for anatomical purposes, and duly buried as that of Mr. O'Grady. The doctor asserted in the death certificate that the symptoms were "fever, delirium, and rose spots on abdomen; duration of

illness twenty-eight days," thus making it appear as a case of typhoid fever. All went well and the insurance was collected. But then the trouble commenced. The conspirators quarreled over its division, and in this way the facts finally became public. Arrest of the guilty persons followed, one of whom has turned state's evidence. This evidence has been fully corroborated by other witnesses. The body was exhumed and found not to be that of O'Grady. Moreover, O'Grady was found at the Soldiers' Home, alive, and in his usual condition of chronic invalidism. It looks at present as though the conspirators will be convicted of their crime and sent to state's prison.

But all this is preliminary to what we wish to say, which is this: *That the doctor concerned in the matter is not a member of the regular profession.* He is an eclectic. The circumstances surrounding this case are so out of the common in criminal annals, that they will be widely published. We hope our readers will take the pains to make known the facts in regard to the doctor's antecedents as above.

Be Energetic as Well as Earnst.

Just why a man who knows himself to be constitutionally lazy should enter the practice of medicine, we have never been able to understand says the Medical World. Long before he earns his diploma he must have understood that the life before him is one of drudgery and toil. Yet he begins practice, but failing to possess sufficient momentum to handle the fastest nerve destroying occupation known, he becomes a drag upon himself, and a poor excuse for a doctor to those misguided persons who employ him through necessity or choice. We know of no profession or occupation which requires more vim and energy than the practice of medicine. We know many brainy, well-qualified men who have failed to possess the necessary "push" to carry the load. It has always seemed to us that even if a man lack natural energy, he might arouse sufficient artificial voltage to carry him through.

A successful commercial company in Ohio issue regularly a "paper devoted to the interests of their patrons, themselves, and their employees." A recent issue contained the following adapted aphorisms, which we are certain can be absorbed and acted upon by a number of practitioners of medicine with marked benefit to themselves and to their patients:

"The way to dig a town out of a blizzard, is for every man to sweep his own door

step. The way to meet our monthly quota is for every man to mean his own. The way to beat it on the month is to beat it every day. The way to do a day's work is to start right, plug hard, and hang on. If the few happy-go-lucky men on our force who think life is too short to bother about doing things right every time, would realize that it is too short to do anything else, we would never miss a quota of sales. If this fits you, put it on."

Crudely exprest, with greater truth than poetry, grammar, or diction, the principles outlined above are heartily commended to the many unfortunate doctors who think themselves crust with indolence. Too many practitioners are slow to respond to an "emergency" (?) call in the mistaken belief that their delay will impress the family with the vast extent of their practise, which forbids immediate attention to many. Is this really the meaning they intend to convey? If the laity learn that you do not respond to calls promptly, as a rule, they will rapidly flock to some other practitioner. Their aims are wholly selfish; yours only partially so. They want immediate attention for their real or fancied ills. Your delay will not appall them; it will only disgust them. In fact, they will often become disgusted if you are really in stern battle with death itself at the bedside of some other patient, and fail to arrive to incise a boil for them, at the precise moment they expect you. You may be lazily content in the knowledge that the family have been perhaps unduly excited anyhow; or that there is no other physician within reach upon whom they may call; but what about your duty? Whether real or fancied, when their ills suggest the summoning of a physician, the average patient begins to feel worse immediately and progressively until the arrival of their medical counsellor. It is certain that they will ferret out your private habits if they once suspect dalliance with a call after they have condescended to call you. Exposure of such practices is fatal in any community. Those who have really needed you least will howl loudest and their wail will influence others.

This very habit is responsible for the decadence of many an older and experienced practitioner's practise in favor of the ascendancy of a younger and more energetic man. Occasionally the laity will excuse much in a medical man's habits but never will they condone evident laziness.

The young man who begins in indolence will end in failure in the practise of medicine. The older man who acquires the

habit will fall in the same ditch. Be thoro; be energetic; be prompt; nothing else will do.

Typhoid as a Summer Diversion.

Summer sojourners in the country, who have returned in sound health to their summer homes, owe much to Fortune says the Maryland Medical Journal. The city, it is true, distributes in her water mains somewhat besides water, but the unmentioned extras at the summer boarding-house are dispensed more lavishly. Life-time doses of typhoid, bestowed by the benevolent city, are the sure defence of ungrateful thousands, but there are other thousands whose hot-weather saunterings come to a safe end through such accidents as good drainage and pure water. These latter, we repeat, owe much to Fortune.

It is possible, if one were overparticular, to learn in advance whether good drainage and pure water are among the chance possessions of mine-host-for-the-hot-weeks. The easy and popular way of determining this is to expose one's family for a season, when, if no sickness results, it is not advisable to return the following season in order to be further convinced. If, on the other hand, typhoid fever should be contracted, it is equally manifest that one should go elsewhere next summer. That one might have gone elsewhere *this* summer is a most unprofitable reflection. How are plain people to know except by experiment?

There are a few pernicky souls, not all of them cranks about these perils by water, who always ask the landlord about his drainage and water supply. What the landlord says upon the subject is sure to be more satisfying than the truth could possibly be. These are the popular means of knowledge employed by all, except those overparticular people who have a phobia about perils by water and perils by false brethren, and who demand means of *fore-knowledge*.

Just a word to the Overparticular. Make your inquiry of the local health officer. The brand-newness of the question may take his breath for a time, but he will probably not lie, and perhaps try to obtain the information which you desire. If he should be able to answer you at once and to give you detailed information, put your hand over his back and demand of him the word, for he, too, is an Overparticular.

But an Overparticular need not stew in town all summer while health officers are digesting his inquiries, for he can drink boiled water if he is brave, and he may eat raw vegetables whenever he dares.

It would be in some sense a pity if there should spring up a great popular demand for authoritative information about local sanitary conditions. Local sanitarians would make haste to meet such a demand, and the information would speedily come within the reach of all. Then would the Overparticular lose his distinction. He might save a shred of dignity, perhaps, by demanding that applied science should displace Chance as the provider of sanitary conditions. It is conceivable that people who are merely enlightened might second such a demand, and even make it popular. So the effrontery of the Overparticular would reduce Fortune to a little "f," and we should load her diamonds into a coal carts. After that the Overparticular must, so far as I can see, share the luck of the Merely-enlightened.

The Latest Phases of Appendicitis.

Despite all the attention that has been given to this extremely interesting subject during the past ten years seldom does a medical meeting fail to bring out, either in the papers read or the discussions they call forth, some features of the affection that have at least an air of novelty, says The Medical News. The last meeting of the American Medical Association was no exception in this respect. Some very suggestive contributions to our knowledge of the affection were made. More practically helpful than the formal ideas of papers and discussion was the trend of thought with regard to certain features and phases of appendicitis, as it could be noted in the course of conversation between those whose clinical experience with the affection amply justify their holding and heralding opinions of their own. It seems well worth while to give a permanent record and a wider audience to some of these suggestive thoughts, and therefore certain of them are collected here.

It seems clear that trauma plays a much greater role in the etiology of the disease than has been suspected. This accounts to a greater degree for the fact that vigorous young men are often the favorite victims of the affection. The position of the psoas muscle with relation to the cecum and appendix is of importance in this matter because the normal function of the muscle may cause disturbances of anatomical relations and consequent interference with blood supply. Direct trauma from blows in the iliac region is frequently noted in the history of these cases. It is probable that the more infrequent occurrence of appendicitis among women is due rather to their

comparative freedom from traumatic disturbances than to the supposed additional artery to the appendix in the sex, the claimed anastomic branch from the ovarian artery. As a matter of fact the statistics of the comparative occurrence of appendicitis in the two sexes are presenting every year a less favorable showing for the female. More successful differential diagnosis between ovarian and appendicular affections are making operations for appendicitis in women much more common than formerly.

Another very interesting feature of appendicitis that is attracting no little attention is the occurrence of the affection among young children. Autopsies in cases of death among children from obscure abdominal conditions have shown in a number of reported cases appendicitis as the primary cause. The number of patients under 5 years of age who have been operated upon for the affection within the last year is quite large. The number of patients even under one year of age in whom appendicitis has been successfully diagnosed and as successfully relieved by surgical interference is already remarkable. It is undoubtedly true that many of the cases of supposed intussusception or even volvulus in the very young are really atypical appendicitis. This fact only emphasizes the doctrine that operation for serious abdominal conditions should be undertaken early and the significant symptoms should not be masked by the giving of large doses of opium early in the attack.

Finally, confidence in making the diagnosis of appendicitis even when the symptoms are not typical is gradually being developed even in conservative minds. The most perplexing confusion of symptoms results when the appendix lies upward along the ascending colon and the pain is referred to the liver region. Suspicion of the presence of a gall-stone is almost sure to assert itself as an alternative diagnosis. At the present time, however, recurrent pain from a gall-stone is an indication for operation. When there is a suspicion that cannot be lulled that appendicitis may be present and not a gall-stone, the necessity for an exploratory operation at least is greatly emphasized.

The Early Diagnosis of Carcinoma of the Stomach.

The prospects of ever attaining comparative success in the surgical treatment of carcinoma of the stomach have to depend not so much upon surgical skill and technical efficiency as upon early

diagnosis, and the term early has now a different significance from what it formerly possessed, says the Medical Record. At present, if a diagnosis is to be designated early, it must be made very much sooner in the course of the disease than would have been considered early a few years ago, when a diagnosis made before a tumor could be palpated was not looked upon as trustworthy. The surgical side of the question of the treatment of this disease is now in a satisfactory condition as far as technique is concerned, and when it is possible to operate upon patients who are in reasonably good condition the immediate results can fairly be called excellent; but unfortunately very few patients are operated upon in a stage of the disease which, in view of our present knowledge, can be called the most suitable and most promising as to the result.

It is safe to say that the prospects of obtaining a real cure when a tumor is palpable, no matter how movable, are very poor, for there are exceedingly few patients operated on under such circumstances who have survived long enough to be looked upon as safe from recurrence, and, furthermore, we know that patients may reach a very advanced stage of the disease, or may die, without ever having given palpable evidence of a tumor. We certainly cannot use the presence of a tumor as a safe means of diagnosis, if we are seeking information to guide our therapeutics to permanent success. There seems, however, to be hope that we may arrive at a state of knowledge which in many cases will allow us to make a diagnosis of strong probability at least at a much earlier stage in the disease than heretofore; but to make this possible the clinician is the one who must get the evidence and draw conclusions, and then call upon the surgeon for the performance of an operation which may be only exploratory. We need not always expect to make positive early diagnosis, but we may hope to collect enough evidence from observation and experiment upon which to base a diagnosis of such strong probability that under reasonably favorable circumstances an exploration will often be justifiable and perhaps be followed by a successful operation for radical cure.

In gathering evidence for an early diagnosis, one of the first points to consider is the age of the patient, in reference to which we may say that more cases occur in those who have passed the age of forty-five years, though exceptions to this general rule are frequent enough. Sex does not seem to be of much significance, though if anything the disease occurs oftener in men than in

women. A history of chronic gastritis or dyspepsia which does not show signs of amelioration under treatment is always suspicious, and when this conclusion is associated with a constantly diminished amount of free hydrochloric acid we may make at least a provisional diagnosis of carcinoma of the stomach, and expect by further investigation to disprove or substantiate it. It has been observed that, in connection with the gastritis occurring in the presence of carcinoma, there are certain irregularities in the life-processes of the epithelial cells of the gastric mucous membrane, the so-called atypical and irregular mitoses seen in these cells when they are collected from the stomach washing either with or without the preliminary scraping of the mucous membrane with the end of the stomach tube in order thus to increase the number of dislodged cells. These appearances are practically always demonstrable and occur early in the disease, before the mucous membrane is actually involved in the carcinomatous process, and though perhaps not pathognomonic are certainly of great importance.

The Oppler-Boas bacillus seems to occur regularly in stomachs which are the seat of carcinoma, but, as a rule, too late to influence the making of a really early diagnosis, and the presence of lactic acid has about the same diagnostic value. It does occur in carcinomatous stomachs, but usually too late in the disease to be of assistance in making the kind of diagnosis which will be of much use to the patient. However, the presence of lactic acid and of a tumor, though not early signs, does necessarily in all cases preclude the possibility of operative cure, though the chances of real cure are much diminished by signs, in the case of the first because the functions of the stomach must be gravely disordered, if it is constantly present in any quantity, and in the case of the second because the disease must have reached very considerable extent if it is possible to feel a tumor through the abdominal walls. Only freely movable tumors need be considered in this connection at all. The discovery of true carcinomatous tissue in the stomach contents undoubtedly makes a diagnosis, but not an early one. A point to remember is that the progress of a case of carcinoma of the stomach will vary according to the site of the growth in the gastric wall and its histological character, so that an early diagnosis in one instance might offer a different prospect from what it would in another. Fortunately, the so-called scirrhus type, intrinsically least malignant, is the commonest, and is most frequently located in the pylorus, where it soonest gives symp-

tom. Hæmatemesis is undoubted a symptom of gastric carcinoma, but there are several other conditions which cause vomiting of blood, sometimes in the "coffee ground" condition, so that at best its presence can afford us only corroboration, often too late to be of any use, in outlining our treatment. The great aid to early diagnosis is exploratory incision, though even this does not enable us to say positively every time whether carcinoma is present, but it does give us evidence as to whether we are called upon to deal with a lesion amenable to operative treatment, so that what to do next is easily decided. Just when and upon what evidence to make an exploratory incision, and whether to proceed at once with a radical operation, are questions which at present must be answered largely from individual experience and opinion; but the exploratory incision is gaining in favor steadily, and justification for its use is sought in the result of formulating facts such as we have mentioned, in its practical freedom from danger, and in the important knowledge which we gain by it. There is room for a judicious extension of its use.

Death from Lightning.

According to the Chicago Clinic statistics collected with much accuracy and care by the Weather Bureau at Washington, acquaint us with the rather startling information that during the year 1899, there were killed by lightning in the United States five hundred and sixty-two persons, and that eight hundred and twenty others were more or less severely injured. The mortality from this source is much larger than the average person would suppose. There is a popular belief that persons are seldom or never struck by lightning in the open. Yet of the deaths enumerated above, 45 per cent. occurred away from shelter. Thirty-four per cent. were killed in houses, while beneath trees only 11 per cent. Thus is another myth of our childhood days destroyed. The most dangerous locality in a thunderstorm is in the vicinity of a wire fence. Quite a number of deaths occurred in persons who subjected themselves to this danger, and in persons who were in the act of removing clothes from wire clotheslines. The safest place in the house is in the center of the room. Open doorways and open windows should be avoided, as well as the neighborhood of chimneys. It is well to avoid the shelter of trees, and the proximity of live stock. On many of the persons killed the lightning left no mark. In some cases there were burns, either upon the body or clothing, or both.

In some instances the clothing was burned while the person escaped serious injury. The vagaries and eccentricities thus displayed by the lightning stroke are hard to account for.

The Action of Iodoform Upon Normal Tissues.

The Therapeutic Gazette says that many of its readers will remember researches which were published some ten to fifteen years ago by various clinicians and bacteriologists in regard to the influence which iodoform exerted when brought in contact with healthy or diseased tissue, and the pages of the Gazette which were devoted at that time to therapeutic progress contained abstracts of these communications. One of the most important of the communications published in 1886 in regard to the valuable effects of iodoform when applied locally to tubercular processes was that of Bruns, of Tübingen, in the *Archiv f. Chirurgie*, concerning the influence of iodoform upon tubercular pleuræ. At first, physicians believed that iodoform acted as a direct antiseptic, but about this time researches proved that it only acted indirectly as an antiseptic, and that it had no bactericidal power of its own. Since that time a number of researches have been published, but aside from those bearing upon clinical experiences they have not been numerous, and we therefore welcome an interesting and valuable communication which has been made to *La Semaine Médicale* of May 9, 1900, by Cornil, professor of pathological anatomy in the Faculty of Medicine of Paris, and Coudray, of the surgical clinic of the same faculty. These investigators have devoted their energies to the study of this drug upon normal tissues, and began by injecting iodoform, dissolved in oil, in the strength of 1 to 12, into the lower animals. Four dogs received two draughts of this solution into the peritoneal cavity, and thirty minims into the knee-joint. An adult rabbit also received the drug into the subperitoneal cellular tissue; and finally they also introduced iodoform under skin of guinea-pigs by means of an incision, and afterwards closed it with a suture. The first dog was killed twenty-four hours after the injection, and the peritoneal cavity did not contain any liquid; the second dog died on the third day, and the third dog after six days. As a result of these injections they find that a certain amount of inflammation is produced. This is characterized at first by the death of some of the endothelial cells and the migration of a considerable number of leucocytes.

After a number of days the serous surface has a somewhat fatty appearance, but expressed briefly, the reaction produced does not differ materially from that which is obtained from the injection of irritant agents such as nitrate of silver in small quantities. They then go on to point out that in the treatment of suppuration in general iodoform distinctly diminishes suppuration and aids in drying up the infected surface. In the case of tubercular abscesses they believe that iodoform injections still remain one of our very best methods of producing good results; the iodoform being dissolved in oil or in ether. Amongst others they quote Kirrmission, who reported to the French Congress on Surgery for 1894 twelve cases of abscess due to Pott's disease which were cured by injections of iodoform and ether; and he also reported another large number of cases to the Society of Surgery in France in 1897 and 1899. So too, Henle (1890 and 1896) observed seventy-three per cent. of cures in 166 cases treated by injections of iodoform and ether; Lannelongue in seventeen cases obtained eleven successes. So, too, Bruns has reported forty cures out of fifty-six cases, and other well known surgeons have obtained similar results.

In regard to the substances which will act best as vehicles for the iodoform, authorities differ. Thus, Mosetig-Moorhof has applied the iodoform in ether after the method of Kirrmission with very satisfactory results; Bruns has used it in olive oil, and Mikulicz in glycerin. Lannelongue has reported good results by using iodoform dissolved in ether to which a small proportion of creosote has been added, as in the following formula:

Iodoform,
Ether, aa $2\frac{1}{2}$ drachms,
Creosote, 30 minims,
Sterilized olive oil, 3 ounces.

In tubercular fistulas iodoform in oil, glycerin, or ether is exceedingly valuable, as it is almost impossible to get the powdered iodoform into the fistulous tract; whereas, if it is injected in one of the fluids which we have named, it is deposited upon the tubercular masses gradually.

Inflated Writing.

The Medical Times has the following Essay on Authors:

How many dictionaries did your young friend have before him when he wrote that article, said an old lady to whom we had pointed in a medical journal an article which we though would interest her. The

article was an excellent one, but so full of technical terms and big words as to be almost unintelligible to one not fully up in purely scientific phrases. This is a fault especially with young writers, but a habit which sometimes clings to them through life and impairs much of their usefulness with the general reader. Herbert Spencer, for instance, wide and richly deserved as is popularity, would have reached a far greater number of minds if his language had been more simple and easily understood by the intelligent general reader. In his great work, *Synthetical Philosophy*, he says that "Evolution is an investigation of matter and comitant dissipation of motion, during which the matter passes from an indefinite incoherent homogeneity to a definite coherent heterogeneity, and during which the retained motion undergoes a parallel transformation." To the thoroughly trained scientific metaphysical mind this might be perfectly intelligible, but to the majority, even of intelligent readers, it would seem so like an unknown language as to cause them to put the book aside. Evolution simply means that the infinite and eternal life moving in an orderly unfolding of itself through the organic ascent of life. This, in Plain English, is Herbert Spencer's meaning of evolution. Probably Prof. Hyatt, in his article on the nautilus, had a distinct idea of the meaning he intended to convey when he said "that the leading characteristic of parallelism in all genetic series of nautiloids is a tending towards closer coiling and greater involution in the more specialized forms of each separate and a correlative increase in the profundity of the impressed zone," but to the majority of our cultured readers he wrote in an unknown language. Herbert Spencer Prof. Hyatt and other profound scientists who are so apt in their writings to think that simple language is not grand enough to express the phenomena of science, if they wished on a stormy day to say it rained would be likely to formulate it in some such words as these: "A condensation of aqueous substance has taken place in the circumambient atmosphere and precipitated itself upon the planet." Cambell, in his "Ferns and Mosses," conveys the fact that ferns and mosses live for a time as parasites on the several organisms that produce them, tells the story in the following clear and simple manner: "The young sporophyte of the peridophyte, like that of the oryctophyte, lives for a time parasitically on the gametophyte." There is no class of men more fond of using technical terms couched in high sounding phrases than a certain class of medical men, oftentimes creating a

laugh when on the witness stand in court or in the popular articles for the public press. Prof. Cope, in his *Primary Factors of Organic Evolution*, tells his readers that "in the first case, that of the human elbow, the cubitus was luxated posteriorly, so that the human condyles articulate with the ulna, anterior to the coronoid process," and this book was written not alone for the skilled anatomist, but for the general reader. A physician in a review for publication of a popular novel expressed his opinion of its moral tone "as a pæan pubescent; the study of a peccant pair and immured study of stercoraceous souls." Clear as the author's mind.

Speaking of cancer, a distinguished author, in an article for a public journal, says: "Carcinoma arises from any subepithelial proliferation by which epithelial cells are isolated and made to grow abnormally." A professor of mental diseases says of insanity: "The prodromic delirium is a quasi-paranoic psychosis in a degenerate subject." A professor of theory and practice conveys the fact to his class that microbes produce the poison erysipelas in this exceedingly lucid manner: "The strophococcus erysipicatus proliferation in the inter-spaces of the connective tissue is the etiologic factor in the secretion of the erysipelatous toxins." A learned surgeon in making post-mortem examination, as the knife disclosed the nature of the disease, said: "That is a colossal carcinomatous degeneration of the hepatic mechanism." It is needless to quote further from the abundant illustrations of what seems to us a lack of good taste in expression and thoroughly bad writing. The best writers, even upon scientific subjects, are noted for simplicity of style and clearness and consciousness of expression. A celebrated clergyman whose sermons were models of well expressed English in their clearness of expression and the almost perfect logic of ideas, every word filling its appropriate place, in reply to our expressed admiration laughingly said, that perfection of style you are pleased to admire was only reached in long practice after a sharp and sarcastic rebuke. In the last year of my college life I was called upon to deliver an address before one of the societies. This address was first to be read to the president. I had prepared myself with great care, and after reading several pages the president said: "What idea do you intend to convey?" So and so, was my reply. "Why do you not say so?" queried the president, and so on to the end of the address. Every few pages came the inquiry, "What idea do you intend to convey there, and why do you not say so?"

and so my address, which was intended to occupy thirty minutes, was cut down to about twenty. That lesson was never forgotten. The resources of the English language are quite sufficient to enable the writer to clothe even the details of scientific facts in language so clear, so poetic, if you please, as to give them that nameless charm which can never be forgotten and which impresses them indelibly on the mind.

MISCELLANEOUS.

NEW YORK, Sept. 15, 1900.

To Editors of the Charlotte Medical Journal:

MY DEAR DOCTORS—In the August issue of your excellent Journal I notice a comment which you kindly made on "A Few Clinical Notes," not long since published in "Gaillard's." A paragraph was devoted to "Cancer of the breast," and it was there stated by me, that the Halstead operation, or wide dissection in the ablation of mammary-epithelioma, as a current procedure, was not only a fallacy, but a cruel mutilation. That position, I am prepared to defend. You commit an error when you say that my objections to the complete operation are based on *one* case.

It is true, that but one case showing wide spread return, after the whole chest wall was dissected away, was recorded by me; this, in three months after the "cure." But I wish to add, now, that I have seen scores of cases of the most harrowing misery and agony in cases which have relapsed in *less* than a year after the axillary dissection and breast excision.

Perhaps, dear Doctor, you are not aware that in the principal cancer hospital of New York, the greater number of cases of mammary cancers are now treated by simple excision of the gland, and that a large number of our most capable surgeons have cast the hospital operation aside. The misstatement by you, that "the Halstead operation has been accepted as the proper operation for this condition in which the glands are thoroughly cleaned out of the axillary space" can by no means be supported by facts, as it is well known that after a long and unbiased trial of it, both here and abroad, it has been cast aside in all except special cases.

In dealing with the therapy of this mysterious lesion let all have the courage of their convictions and affirm what the latest scientific studies on cancer demonstrates, viz: that the cause, origin and pathology

of cancer are yet enshrouded by the deepest obscurity and only the abnormal deviations in the histological element are we familiar with.

Very truly yours,

THOS. H. MANLEY.

The Medical Society of the Missouri Valley

held its annual meeting at Council Bluffs, September 20th. Three sessions were required to complete a most interesting program, and later, at the Grand Hotel, the members gathered around the festal board, where they recuperated from the labors of the day.

The society voted to contribute \$25 to the Rush Monument Fund, and a resolution was adopted providing for a banquet after each meeting.

Following officers were elected: President, Dr. V. L. Treynor, Council Bluffs; First Vice-President, Dr. B. B. Davis, Omaha; Second Vice-President, Dr. F. E. Sampson, Creston; Treasurer, Dr. T. B. Lacey, Council Bluffs; Secretary, Dr. Chas. Wood Fassett, St. Joseph. Next meeting in March, 1901, at Omaha.

The Third Pan-American Medical Congress.

The following announcement for the coming meeting of the Pan-American Congress has been received from the Secretary, Dr. Thomas V. Coronado, of Havana, December 26, 27, 28, and 29, 1900:

Executive Committee.—Dr. Juan Santos Fernandez, President; Dr. Gustavo Lopez, Vice-President; Dr. Enrique Acosta, Treasurer; Dr. Vicente B. Valdes.

Committee Members.—Dr. Jose I. Torrobas, Dr. Eduardo F. Pla.; Thomas V. Coronado, Secretary.

George Quackenbos, a patrolman on the New York police force, reads Greek, understands the sign language, is a good telegraph operator, has filled the chair of rhetoric in Seton Hall, New Jersey, and lastly, holds the degree of doctor of medicine of the New York University Medical College. He is the son of Professor George W. Quackenbos, professor of Greek and Latin in La Salle Institute, and is probably the only man who has forsaken medicine to wear the uniform of "The Finest."

No doctor is justified in permitting the pain of burns to last over five minutes, for Acneine will relieve it in that time, and will heal the sore and leave less scar than any other remedy.

Legalizing Clairvoyants.

It is said that there are between eight and ten thousand clairvoyants in Chicago. Whether this is true or not we are not prepared to say, but judging from the number who advertise in the papers and from the number of signs scattered over the city it is quite probable that the number is not overestimated. Some of the leaders among them have presented an ordinance to the city council providing that clairvoyants shall hereafter pay a license fee of \$800 a year. This is for the purpose of regulating things so that there shall not be as much "promiscuousness" as now seems to prevail; in other words, they desire to limit the number. What a joke it would be if the city council of the great and enlightened city of Chicago should pass this measure and thus legalize this modernized ancient method of swindling! And stranger things have happened in city councils.—*Journal Amer. Med. Ass.*

"Canst thou minister to a mind diseased?" Perhaps not, but a Spanish physician has discovered a specific for that strange, elusive insanity—"love's sweet melancholy." It is to be found at a spring in Alanje, province of Badajoz, the waters of which are a specific for broken hearts. The influx of sighing maids and love-lorn squires has already commenced. What a possibility for the summer girl? How convenient the locality which provides both the disease and the specific—how convenient!—*Medical Standard.*

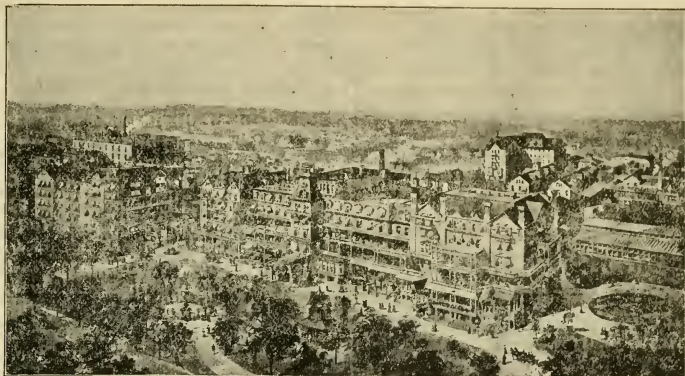
The importance of compelling the use of special bottles for containing poison which may easily be recognized at night, is frequently being forced upon us by some unnecessary fatality or some mistakes which come near to being serious. Not long ago a physician in the Bedford section took a swallow during the night of tincture of aconite instead of a cough mixture. By the prompt work of his friends he was soon suffering merely from the effects of mustard, stomach tube and apomorphia.—*Brooklyn Medical Journal.*

Young Waiter (at a medical dinner): "Them doctors use a lot of wine, but I s'pose they kin stand it."

Old Waiter; "Dunno about that; I'm thinking they're gittin' pretty tight already."

"They don't look so."

"No; but they're beginnin' to agree."—*Phil. Rec.*



The Battle Creek Sanitarium

Is a place where chronic invalids, especially those suffering from the various forms of indigestion, diseases peculiar to women, constipation, chronic malarial poisoning, anæmia, obesity, the uric acid diathesis, neurasthenia, migraine, and similar ailments are trained into health by the aid of systematic regimen, scientific hydrotherapy, massage, Swedish movements, Swedish gymnastics, and other rational means. Most cases of Bright's disease, diabetes, locomotor ataxia, and many other maladies which are incurable under ordinary conditions, are greatly improved by the combined use of rational remedies and systematic regime, and many are practically cured. Extensive bacteriological, chemical, and microscopical laboratories connected with the institution afford excellent facilities for accuracy in diagnosis and original research.

The Institution is conducted strictly within ethical lines.

For information concerning the facilities afforded, terms, etc., address

THE SANITARIUM, Battle Creek, Mich.

The Use of Hydrozone and Glycozone in Gastric and Intestinal Disturbances.*

W. H. Vail, M.D., Physician and Surgeon,
Medical Examiner for Fraternal Mystic
College, Philadelphia, Pa., Assistant
Editor St. Louis Hospital Bulletin.
Visiting Surgeon to Maryland
Sanitarium. House Physician
for William Barr Dry Goods
Company.

I have, for a long time, been rather enthusiastic over the value of Hydrozone and Glycozone in treating diseases, and can attribute much valuable assistance and extraordinary results from their use in the last few years. The medical profession, in fact, has never gained such remarkable results from the employment of any production as it has from the use of these preparations, and my recent effects have almost, in a

measure, surpassed them all. I will give a brief report of one remarkable case. I could mention several others, but a physician's time is valuable, and often he has not the moment to spend in perusing a legion of cases, so I select this one, it being the severest of all, to demonstrate, the potency of Hydrozone and Glycozone:

I was called to treat a young man, suffering from a severe gastro-enteritis. I found him in a most serious condition, having been delirious for three days. His temperature was sub-normal, 97.6, pulse 60, respiration 16. He was greatly emaciated, atonic, had inappetence, a severe agonizing pain in the stomach and intestines, at times so severe that he would sit on the edge of the bed and groan, oftentimes, yell. These attacks were always of a similar nature and occurred regularly. He was unable to take either solid or liquid food, even in small quantities without causing a return of the pain, a teaspoonful of milk being sufficient to produce it. His condition was pitiable. His cheeks were hollow, eyes congested.

*Reprint from Medical Mirror for December, 1899.

skin pale and sallow and his whole appearance showed the presence of intense pain.

I was called at the end of the third week of his illness. The former physician had employed opiates in large doses with most worthless results, also many other drugs with not a sign of improvement, he growing seriously worse. I determined that Hydrozone and Glycozone were the remedies indicated, and were the only ones that would be of value here, therefore, I gave him, at once, one-half glass of a mixture of one-half ounce of Hydrozone with a little honey to one quart of water. He was somewhat disturbed for a while after the portion, but was soon relieved. The distress, I presume was due to the advanced stage of the inflammation. I continued to administer this for some time, with only a slight improvement, but after several doses had been taken, the relief was very decided. After his nourishment, I gave one teaspoonful of Glycozone in a wine glass of water. After a few doses of this, he was much easier and, at midnight, fell asleep and slept all night, not awakening until morning, the first sleep that he had had in five days. I had previously discarded all other remedies, of which there was a large number, as one after another was given with no benefit. All of the acute symptoms disappeared in a few days, at which time he felt very much better, and he continued to improve without having a recurrence of any of his old severe symptoms. Before this I had increased both the nature and the quantity of his food which he relished greatly. I continued the Hydrozone and Glycozone for a month after, to entirely reduce the inflamed condition of the mucous membrane of the gastro-intestinal tract. These two remedies have afforded me most excellent issues many times in the treatment of gastric and intestinal disorders.

All gastric and intestinal disturbances are caused by the lining of the stomach becoming inflamed, and in order to allay this inflammation, it must first be treated with antiseptics then with medicaments that both heal and stimulate the mucous membrane that has become diseased. The most common cause for this state of inflammation is a greatly diminished quantity of gastric juices necessary for digestion, consequently, the food partaken of, instead of being assimilated, ferments, in other words, the peptic glands whose function it is to secrete the gastric juice, do not perform their function properly. These must be restored to their normal state at once, which is accomplished by remedies that exert a stimulating effect upon them, and at the same time are non-toxic, else the trouble

will only be aggravated. Hydrozone and Glycozone are the only remedies par excellence for these two purposes, and the success that I have obtained from the employment of them during the past few years will lead me to always use them in these disorders.

Hydrozone causes destruction to microbes, has no deleterious action upon animal cells, possesses no toxic qualities, exerts no corrosive effect upon healthy mucous membranes when used in diseases caused by germs, is a pus destroyer and a stimulant to granulating tissues. Hydrozone is destruction itself to the skin or mucous membrane that has become diseased, and leaves the subcutaneous tissues in a perfectly healthy state.

Glycozone while not so rapid in its action as Hydrozone is, nevertheless, just as sure a stimulant, and in all gastric and intestinal disorders, exerts a potent and uninjurious effect upon the diseased mucous membrane of the stomach, healing it to a nicety. It is an effective oxidizing agent, has an agreeable, sweet and, at the same time, slightly acid taste resembling lemonade. Its use produces no deleterious action on the heart, liver or kidneys.

The beneficial results which Hydrozone and Glycozone have afforded me in the treatment of this class of disorders have caused me to discard all the other methods of treatment by drugs that exert an ephemeral influence but do not jugulate the offending condition. What is needed in these diseases is an antiseptic that will destroy all pathogenic germs, and at the same time stimulate the walls of the stomach. Hydrozone kills the bacteria, dissolves the mucus and prepares the stomach to better digest the food, in short it deterges the stomach, hence in it we have an efficient antiseptic. Glycozone removes the mucus from the walls of the stomach, stimulates and heals. I have discovered these two preparations to be ideal ones in treating this very common and distressing disorder.

St. Louis, Mo.

Ingluvin a Succedaneum for Pepsin: in all Cases Superior to pepsin of the Hog.

Dr. J. E. Hayes, of Bradford, Pennsylvania, has found, after trial, that Ingluvin is a decided stomachic restorer and digester.

He also relates the circumstance of a case of persistent hiccough which had resisted all the usual remedies; having some Ingluvin at hand he administered two powders, and much to his surprise, the spasms were promptly checked.—*The Monthly Retrospect of Medicine and Pharmacy.*

Rockbridge, Va., Alum Water.

That are of Intrinsic Value to the Medical Profession.

Extract from a paper read before the Atlanta Society of Medicine, April 26, 1887, by JOHN S. TODD, M. D., Professor Materia Medica and Therapeutics, Atlanta Medical College, Ga.: Ex-President of Georgia Medical Association; not read in our interest, but in the interest of Science and his profession:

"Some four and a half years since I had, among other cases, one of dysentery, which resist ing all medication, became chronic, and a LARGE ULCER OF THE RECTUM DEVELOPED. I called in consultation a noted surgeon. The patient's condition was one of extreme emaciation; blood and mucus in large quantities were voided about an average of once an hour. The dose of opium had been increased to 3 dr. laudanum in twenty-four hours and $\frac{1}{2}$ gr. morphine twice a day, and still matters grew worse. We decided to inject solution 30 grs. to oz. nit. silver in rectum. The result was a COLLAPSE that nearly proved FATAL. Upon it being suggested later that the operation be repeated, the patient, a young man, said if we and his family insisted, to avoid it HE WOULD COMMIT SUICIDE. Dr. W. S. Armstrong was then called in with me. He suggested an exclusively milk diet, gradual reduction of opium, and ROCKBRIDGE (VA.) IRON AND ALUM WATER. Immediate improvement set in, and in TEN DAYS so great was the CONSTIPATION that oil and enemas had to be resorted to to procure an evacuation from the bowels. Since that time I HAVE TREATED SEVERAL CASES EQUALLY AS BAD, WITH SAME HAPPY RESULT, using same diet and medicines, for of all agents for this disease, I consider THE ROCKBRIDGE ALUM AND IRON WATER THE FIRST. It is equally EFFICACIOUS in CHRONIC DIARRHŒA, AS MY RECORDS ATTEST."

DR. TODD, March 21, 1900, writes: I have for 16 years used these GRAND WATERS constantly in my practice with increased and increasing satisfaction, I inclose you article written 3 years ago on opium. "In chronic diarrhœa and dysentery, the milk diet, ROCKBRIDGE ALUM WATER, and small doses of opium given cautiously—very cautiously lest your patient acquire the opium habit—has proved so INVARIABLY SUCCESSFUL with me, that I have COME TO TREAT THESE CASES WITH A CONFIDENCE BORN OF SUCCESS."

DR. HUNTER MCGUIRE, Virginia's great surgeon, says: As an astringent and tonic it is one of the most valuable I have ever used.

DR. S. GAILLARD THOMAS, Professor College of Physicians and Surgeons, N. C.: Most efficient astringent and tonic waters I have ever employed.

Write JAMES A. FRAZIER, Mgr. Receiver, Rockbridge Alum Springs, for Pamphlet.

CHAPEL HILL, N. C., Sept. 30, 1900.
Editors of the Charlotte Med. Journal:

DEAR DOCTORS.—May I ask you to do me a favor in the columns of the Journal? I am very anxious to secure certain material for study, and do not know any way of getting it except appealing to the doctors of the State:

First, I should like to receive as many examples as possible of malignant tumors originating in pigmented moles.

Second, I want to get a collection of human embryos in the earlier stages—say 8 inches long and under. There must be a great deal of valuable material of this sort wasted every year. I should be very thankful to any physician for specimens of the above sort. They may be sent by express in alcohol, at my expense, of course. Will you kindly make this statement in the Journal, and greatly oblige,

Yours sincerely,

R. H. WHITEHEAD.

The complete novel offered us by the "New Lippincott" Magazine of October is a stirring good one in the field which has set us all to looking up our ancestors and reading American history. It is called "My Captive," and is by Mr. Joseph A.

Altsheler, whose recent story of the civil war is now passing into many editions. "My Captive" is the heroine. She is the gallant daughter of an English officer, whose beauty and courage are alike worthy of her martial birth. She leads her American captor a wild gallop over historic ground and wins from his heart a submission he can never win from her English pluck. The scene lies at the South during the Revolution, and it is full of vivid fights that thrill the native pulse.

Dr. John B. Murphy has accepted a Professorship in Surgery and Clinical Surgery in the Northwestern University Medical School Chicago Medical College. Dr. Murphy has been appointed Surgeon-in-Chief of the Mercy hospital with the direction of the surgical teaching in that hospital. He will give two clinics each week at the hospital. The hospital now contains 260 beds with abundance of clinical material. A new amphitheatre with a seating capacity of 300 is in process of construction.

Dr. Archibald Church has been recently appointed Professor of Nervous and Mental Diseases in Northwestern University Medical School-Chicago Medical College and head of the Neurological Department.

Alvarenga Prize of the College of Physicians of Philadelphia.

The College of Physicians of Philadelphia announces that the next award of the Alvarenga Prize, being the income for one year of the bequest of the late Senor Alvarenga, and amounting to about one hundred and eighty dollars, will be made on July 14, 1901, provided that an Essay deemed by the Committee of Award to be worthy of the Prize shall have been offered.

Essays intended for competition may be upon any subject in Medicine, but cannot have been published, and must be received by the Secretary of the College on or before May 1, 1901.

Each essay must be sent without signature, but must be plainly marked with a motto and be accompanied by a sealed envelope having on its outside the motto of the paper and within the name and address of the author.

It is a condition of competition that the successful essay or a copy of it shall remain in possession of the College; other essays will be returned upon application within three months after the award.

The Alvarenga Prize for 1900 has been awarded to Dr. David De Beck, of Cincinnati, Ohio, for his essay entitled: "Malarial Diseases of the Eye."

THOMAS R. NEILSON, M.D., Secy.

New Home for J. B. Lippincott Company.

An important transaction has just been concluded by which a number of old-fashioned dwelling houses on East Washington Square have passed from the ownership of the heirs of the famous lawyer, Horace Binney, and will soon be torn down to make way for a fine building to be occupied by J. B. Lippincott Company, whose old home on Filbert Street, above Seventh, was burned down some months ago. Possession is to be given by September 14, and it is expected that the demolition of the old structures will begin soon after. The site is considered a very eligible one for the Lippincott Company, as it has light on three sides, is very central, and they will be enabled to promptly issue and increase their excellent line of medical publications by standard authorities. By the way, their new catalogue, just issued, is handsomely illustrated with excellent portraits of many of America's leading medical writers.

Many historic recollections cluster about the properties just sold. They stand on the ground once occupied by the old Walnut

Street Prison, built before the Revolution, and in which during the struggle the English confined American prisoners during the former's occupation of Philadelphia.

Angier's Petroleum Emulsion.

Dr. Osler, of John Hopkins University, in a recent paper stated: "Arrest or cure of tuberculosis is a question entirely of nutrition, and the essential factor is so to improve the resisting forces of the body that the bacilli cannot make further progress, but are so hemmed in that they are either prevented effectually from breaking through the intrenchments, or in rare cases, they are forced to capitulate and are put to the sword."

Clinical experience has demonstrated beyond a doubt that Angier's Petroleum Emulsion with Hypophosphites fully meets the foregoing conditions. Its efficacy in relieving the distressing cough of Phthisis has been recognized from the first, but it is only within recent years that the medical profession have begun to fully appreciate the importance of its action in the digestive area and its powerful influence upon the nutritive processes. Stimulating the appetite, anti-fermentative, soothing, healing it not only checks noxious chemical fermentation, and the absorption of such noxious fermented residuum of digestion in the blood but it soothes and cleanses the entire mucous surface, producing a more healthy tone and power of assimilation, and leaving the digestive organs in a condition to better perform their natural functions. With the improvement of the process of digestion, assimilation and nutrition, the condition of the diseased lungs must of necessity improve.

Up in Webster, Mass., a few days ago, little Theodore Plausse, in absence of parents, who were at church, played with matches not wisely but well. His clothing was soon ablaze and his grandfather, who was a Christian Scientist, did not interfere, but prayed, and little Theodore was buried two days later. Grandpa Plausse was consistent, to say the least. Non-interference in cases of diphtheria and other infections is quite as unintelligent and unkind as non-interference in a case of fire; but in all such cases the State should interfere and punish those who neglect their duty as accessories to murder or manslaughter; and so it is to be hoped that as little Theodore is in his grave his deluded ancient relative is where he belongs—in jail.—*Gaillard's Medical Journal*.

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The word Listerine assures to the Medical Profession a non-poisonous antiseptic of well proven efficacy; uniform and definite in preparation, and having a wide field of usefulness.

On account of its absolute safety, Listerine is well adapted to internal use and to the treatment of Catarrhal Conditions of the mucous surfaces.

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FOR DISEASES OF THE URIC ACID DIATHESIS:

Lambert's Lithiated Hydrangea

RENAL ALTERATIVE--ANTILITHIC.

The ascertained value of Hydrangea in Calculous Complaints and Abnormal Conditions of the Kidneys, through the earlier reports of Drs. Atlee, Horsley, Monkur, Butler and others, and the well-known utility of Lithia in diseases of the uric acid diathesis, at once justified the therapeutic claims of LAMBERT'S LITHIATED HYDRANGEA when first announced to the medical profession, whilst subsequent use and close clinical observation has caused it to be regarded by physicians generally as a very valuable Kidney Alterative and Antilithic agent in the treatment of

Urinary Calculus, Gout, Rheumatism, Cystitis, Diabetes, Hematuria, Bright's Disease, Albuminuria, and Vesical Irritations Generally.

Realizing that in many of the diseases in which LAMBERT'S LITHIATED HYDRANGEA has been found to possess great therapeutic value, it is of the highest importance that suitable diet be employed, we have had prepared for the convenience of physicians,

DIETETIC NOTES.

suggesting the articles of food to be allowed or prohibited in several of these diseases. A book of these Dietetic Notes, each note perforated and convenient for the physician to detach and distribute to patients, supplied upon request, together with literature fully descriptive of LAMBERT'S LITHIATED HYDRANGEA.

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Brief Notes on Pneumonia as Treated by Creosotal.*

By Charles F. Stokes, M.D., U. S. Navy;
Executive Surgeon, Naval Hospital,
Brooklyn, N. Y.

Late in October last my interest in pneumonia and its treatment was excited by watching a patient in the Naval Hospital, who for twelve days suffered from pneumonia in its asthenic form. Toxemia produced symptoms out of all proportion to the extent of lung involved.

The right lower lobe was solid, the temperature ranged for days between 105 and 106 degs., and the patient finally recovered. His respiration ranged between 86 and 96 per minute. He simply lay in bed panting. His case certainly looked hopeless. Nourishment, strychnia, whisky, and oxygen were the remedies employed, and they kept the machine going, but gave him little relief.

About this time the synopsis of Dr. A. H. Smith's most valuable paper on pneumonia was brought to my notice, and I heard that most instructive paper read before the Academy of Medicine, and was greatly interested in the discussion which followed. His pathology of pneumonia is familiar to you all, no doubt. The treatment by Creosotal may also be well known to you. It seems a most reasonable plan of treatment, and well adapted to the pneumonias we see in the navy in young adults, early in the disease. I have employed it in seven cases with excellent results. It is used here in conjunction with other treatment, such as strychnia, to tone up the heart; nitroglycerine, when venous engorgement is present; digitalis, with a vasodilator for cardiac irregularity, alcohol, etc.

A brief note of one or two cases will give a good idea of how the cases ran under this treatment:

CASE 1. S. T. A., colored, 30 years old; admitted on third day; temperature 104.2 degs.; hurried respirations, bloody sputum; right lower lobe involved. Creosote carbonate, 12 minims, was given every two hours. The temperature fell to the normal, by lysis, on the seventh day.

CASE 2. R. C. A., white, 25 years old, had a heavy chill on December 25th, in the evening, with sharp pain in the right side. He was sent to the hospital next morning, when the signs of beginning pneumonia were found in the lower lobe of the right lung. He was anxious, face flushed, and

temperature 104 degs., and was typically pneumonic in appearance. His sputum was sticky and blood-tinged. Under Creosotal, 12 minims, in capsules every two hours, the temperature fell to the normal in thirty-six hours. The case was ideal for the treatment employed, as it was seen so early in the attack.

The other cases, except the seventh, were typical and responded promptly.

The seventh case was that of a lady 74 years of age.

After three or four days of "grippy" symptoms the patient had a heavy chill, sharp pain in the left side, and vomiting. Creosotal, 12 minims, every three hours was given. In forty hours the temperature, which had been 103 degs., dropped to the normal. Shortly afterwards the patient had a second chill, the pulse became weak, irregular and intermittent, and the temperature shot up to 104 degs. The patient's condition appeared very unfavorable. An examination showed a massive pneumonia involving the right lower lobe in addition to the lesion already noted.

Creosotal was persisted in, in conjunction with the usual remedies mentioned above. Two days after the second invasion the temperature fell to about 100 degs. F. The urine was smoky during treatment, but this is due to a chemical change, and not disintegrated red blood cells, as was once supposed. Convalescence was prolonged, but the patient passed the danger point early. The treatment does not seem to disorder the stomach. Early treatment offers the most satisfactory results.—*The Brooklyn Medical Journal*, August, 1900.

"Sport."

A slugging-match between two brutes took place last week in this city, and the beaten man lay insensible for nearly five hours. It was briefly noted in the newspaper report "that the blow which the man received when his head struck the stage at the time of the knockout, together with the plexus blow and other severe body punishment, had brought him to a state of collapse, but that no serious results would be likely to occur." In the meantime the victor was receiving the homage of his devoted admirers. Evidently the "boxers" are not all in China.—*Medical Record*.

According to Noble W. Jones, virulent tubercle bacilli are to be found in the nasal cavities of healthy persons in the ordinary walks of life, but most frequently in those persons who have the care of the tuberculosis.

*Read before the Medical Society of the County of Kings.

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ODOZEN—an iodine derivative of methyl salicylate (true oil of wintergreen) it has an agreeable odor, is non-irritant, and combines the antiseptic, discutient, alterative and absorbent qualities of iodoform without any of its characteristic disadvantages.

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The density of Iodozen is less than that of iodoform, hence a given quantity will cover a larger surface; it is, therefore, more economical.

Iodozen is absorbed slowly and adheres to sores and mucous membranes for a considerable period, and in the meantime exerts a protective as well as antiseptic effect.

These qualities place Iodozen in the front rank of antiseptic applications in the treatment of aural, venereal, and cutaneous diseases, in minor surgery and catarrhal affections of the uterus and nasal mucous membranes.

Iodozen, when mixed with powdered boracic acid in the proportion of 5 to 10 per cent. and used by insufflation, is of value in post-nasal catarrh and ulcerated conditions of the throat, but in specific lesions it is advisable to apply Iodozen pure, in order to produce the necessary antiseptic impression.

A useful dusting powder for the chafing of infants is made by combining Iodozen 5 per cent. with powdered starch—in erysipelas, Iodozen may be advantageously applied to the inflamed surface undiluted.

Combined with vaseline or lanoline, Iodozen forms an ointment of general utility as a healing application, and for the relief of puritis ani and vulva, hemorrhoids, prostatic irritation and gonorrhœa, in which affection it may be used as an injection.

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Abscesses	Impetigo	Sun-burn
Burns	Irritation of the skin	Septal ulceration,
Balanitis	Ozœna	syphilitic or traumatic
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Case of Ulcerative Colitis.*

George H., age 32, American. Diagnosis: Ulcerative Colitis.

This patient was admitted to the hospital May 2nd, 1900; had been a sufferer for some three months, and during that time was under the care of a rectal specialist in New York, but in spite of this got no better and the condition steadily grew worse. He said that at the time of the beginning of the condition, it commenced with a slight diarrhoea, loss of appetite, nausea and a slight continuous fever. At the end of a week he began to have considerable pain on pressure along the transverse and descending colon, also tormina about the umbilicus, burning pain in the rectum with the sensation of the presence of a foreign body, and a constant tenesmus. He said the stools for the first few days contained more or less fecal matter, but they soon changed to greenish, tough, transparent mucus, containing some blood and pus. During the tormina, nausea and vomiting were present; the urine was scanty and highly colored; and the number of stools ranged from 5 to 20 in the 24 hours. At the end of a week he said he was so weak that he could not leave his bed.

On entering the hospital he was greatly emaciated, and so weak that he had to be carried from the ambulance to his bed. Examination shortly after his entrance showed the presence of a mild general peritonitis which was chronic in form. He had been living on peptonized milk and various other prepared foods, but was able to retain but very little of it, and what he did retain distressed him greatly and gave him but feeble nourishment. His temperature was 101.5, pulse 122; microscopic examination of the blood showed only 150,000,000 red cells to the cubic millimetre with a greatly decreased quantity of hæmaglobin and an increase in the white cells.

The patient was put on bovine, half a teaspoonful in lime water every hour. Also a rectal injection of bovine, one ounce once in 24 hours, the object of this high injection being two fold: First, to bring about a reparative process of the mucous membrane of the bowel, and to render the lower part of the tract aseptic. He began to improve almost from the first. This treatment was continued up to May 7th, when the quantity of bovine was increased to two teaspoonfuls every hour, in sterilized milk and lime water. The rectal injections were given once in 48 hours, and two ounces employed instead of one.

May 12 the bovine was increased to a

tablespoonful every two hours and the rectal injections reduced to an ounce again and employed every third day. At this time he was free from pain; the peritonitis had subsided, temperature was normal, pulse 99, evacuations were about three to four in 24 hours, not painful, containing no blood or pus but some mucus. He had a desire for food, and when allowed some light and easily digested diet, retained it without any inconvenience and seemed to relish it.

On the 20th, the bovine was increased to a wine glassful every two hours, and rectal injections of bovine pure were employed once in 24 hours.

On the 25th he was up and about, feeling as he expressed it, "first rate"; had gained some nine pounds in weight, color was good, pulse and temperature normal, defecations two in twenty-four hours, no pain, slight trace of mucus. He was allowed a light general diet, and the bovine continued as before.

On June 1st he was discharged, cured.

The case I deem of especial interest, for it was a well defined case of ulcerative colitis in an advanced stage and had resisted the most approved methods of treatment. Under the blood treatment, it began to improve from the very first, and went on to an absolute cure without a single interruption.

It gives me great pleasure to highly commend this most valuable preparation in the treatment of all these chronic bowel conditions. I have seen old rectal ulcers that had resisted all treatment, heal rapidly and within a comparative short space of time. Another thing of great interest is that the mucous membrane when treated with bovine seems to be absolutely restored to normal, leaving not the semblance of a cicatrix. There is no danger of a ptomaine poisoning from the bovine, as it is absolutely a sterile preparation, the nutritive principles being rapidly absorbed, so that within an hour after their application, nothing is left at the site of the application but the antiseptic principles and immediate topical nutritive effect of the preparation.

"I have been prescribing Hagee's Cordial Cod Liver Oil Compound for years with very satisfactory results in many diseases where reconstructives and nutritives are indicated, as well as Incipient Phthisis and obscure diseases. On account of its palatability patients will take it in quantities and long enough to secure results."

G. W. BUCHANAN.

*By T. J. Biggs, M.D., Stamford, Conn.

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Experiments with X-Rays in Electrostatic Field.

The well-known fact that light movable bodies, when placed in a Crookes tube, enter in movement under the action of the cathode rays, is used to support the hypothesis that these rays are formed material particles moving with a certain velocity. Nevertheless, it is remarked that presence of cathode rays is not necessarily connected with the production of the movements, for these are observed to commence before the rays appear, and to cease when the rarefaction is pushed to a certain point, even though the cathode rays are still very intense. It is more probable that the movements are due to electrostatic action, especially if they are compared with those which have been studied by Groety in the case of Roentgen rays. This experimenter disposes of a very light movable body, carried on the point of a needle, between the two plates of a charged condenser. In this constant field the body remains at rest, but when Roentgen rays are brought into the field, it enters into rotation, which lasts as long as the rays continue to act. With condensers of small dimensions and a movable arrangement formed by two disks of copper foil united by an insulating cross-piece, the direction of rotation is found to change with the direction of the electrostatic field. The position of the tube emitting the rays also affects the sense of rotation. The two plates of the condenser are not indispensable in the experiment; they may be replaced by a small sphere, or even suppressed altogether, and the vanes placed in the air in the neighborhood of a Crookes tube. The rotation is not a direct effect of the Roent-

gen rays, for it ceases when a sheet of ebonite or aluminium is placed between the tube and vanes, the rays still passing through this screen.—*Scientific American*.

Where to Vaccinate.

There can be very little doubt that the spot on the outside of the arm, where vaccination is usually performed, has been chosen from motives of convenience rather than æsthetics, and with but small reference to the feelings of the little patients in after life. So far as convenience is concerned nothing could be better; and when the good time comes when to be unvaccinated will be considered a disgrace, no doubt every young lady will be proud to carry her scars open to public view. In the meantime they don't like it, and many attempts have been made to find a better place. On the whole, the most popular substitute seems to be the leg. The objection to using the leg as a site for vaccination arises chiefly from the difficulty which is found by some mothers in keeping the part dry and clean; but with modern methods of protected vaccination this may not prove so important as it was when all vaccinations were left bare. Take it altogether, however, the most generally convenient place will probably be found to be on the left flank, over the lower ribs; in fact, just above where the child's napkin comes. If babies were reasonably dressed, that would be a spot on which but little friction need ever fall, on which it would be easy to apply a protective dressing, and on which the necessary area of cicatrix would not become a deformity. Moreover, much of the trouble which sometimes follows vaccination arises from the area of vesication required, and its being crowded on the small extent of surface offered by the arm. But with a larger area to work upon the vesicles might be further apart, and it is not impossible that much secondary inflammation might be saved. All, however, depends upon how the baby is dressed. So long as the attempt is made to make an infant's clothes fit, it is no use vaccinating just where they are sure to rub, and the choice probably lies between arm and leg—arms for boys and legs for girls.—*Hospital*.

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OMAHA, NEBRASKA.

The So-Called "Ether Pneumonia."

Silk writes in the London Practitioner for March, 2900, as follows: "(1) Ether inhalation is only one of the lesser exciting causes of croupous pneumonia. The stimulating properties of the vapor may even help to ward off attack. (2) Catarrhal conditions of the mucous membrane of the air-passages are universal under ether, and their tendency is to subside on withdrawing the vapor. In a small proportion of cases, however, an inflammatory condition is produced, and the patient's life is in jeopardy. Other concomitant causes will then generally be found at work, e.g., cold and exposure. (3) To limit this tendency careful precautions will usually suffice, especially in the direction of avoiding exposure, cold, and draughts."—*Therapeutic Gazette*.

Sanmetto in Cystitis and Prostatitis—Also Gravel.

I used a bottle of Sanmetto upon myself. I was suffering with cystitis and prostatitis and received some relief. I think by continuing its use will effect a cure. My age

is sixty-five years, not so easily cured as younger persons. We have a man in town by name, J. S. K., who has been suffering with gravel for years and had spent much with physicians. He used Sanmetto, and it would be hard to believe the amount of calculi that passed in a few days; in fact it was disintegrated and passed so rapidly that he was forced to stop the medicine for several days. If desired, he will report the case himself.

J. H. DeSHONG, M. D.,
Judsonia, Ark.

A Dirty, Dangerous Habit.

It is a dirty habit to spit on the fingers or thumb and use them to turn pages of books. Any man who reflects for a minute on this subject will admit that it is unfair to expect his neighbor who handles a book after he does to run the risk of catching consumption or syphilis from the fact that the bacilli are dried on the pages and may be transferred to his own mouth, nose, eyes or ears, especially if he be dirty in his habits also. Physicians, guard thy tongue and thy fingers.—*So. Cal. Practitioner*.

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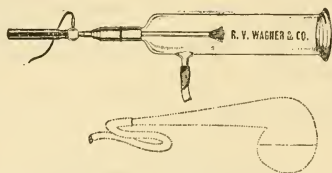
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Notice-- SANDER & SON'S EUCALYPTOL is invaluable in inflammation of the mucous membranes, and in all septic and infectious diseases. Apply to Dr. SANDER, Belle Plaine Iowa, for sample and literature of Sander's Eucalyptol. Meyer Bro.'s Drug Company, St. Louis, Mo., Sole Agents.

Static Electricity.

Much attention is being given to the use of Static Electricity as developed by a Static Machine running at a high rate of speed. For many purposes the current thus developed is of special value and its latest application for the cataphoresis of gaseous substances, such as volatilized mercury, formaldehyde, oil of cinnamon etc., has proven to be a most effective means of applying such remedies direct to the diseased tissues and is an effective treatment for consumption, tubercular joints, glands or any local infection. Dr. R. V. Wagner has lately invented and perfected an instrument which makes the use of Static cataphoresis most convenient and will enable any one having a Static machine to avail himself of this new and effective mode of treatment.



The instrument consists of a glass cylinder made to fit closely to the skin at one end, while the other is fitted with an adjustable discharge brush; the brush should be attached to the positive pole, while patient is in contact with the negative. The discharge of current passing from the brush to the patient through gases of medicated air, (which may be admitted to the cylinder through an opening leading to a retort or other receptacle by rubber tubing) drives the substance in with much greater penetration and in a form more suitable than any other known means of cataphoresis.

Sanmetto in Senile Impotence and as a General Remedy in Genito-Urinary Conditions and Complications.

Sanmetto has, during the past few years pleased me very much, particularly in senile cases, where impotence was and had been pronounced for years. As a general remedy in genito-urinary conditions and unpleasant complications accompanying these cases, the results are, in the majority of cases, very satisfactory.

CHAS. E. BENNETT, M.D.,

1876 Detroit School of Med.; Mem.

Am. Med. Assn., Ohio State Med.

Soc., late Pres. Fulton Co. (Ohio)

Med. Soc., Surg. L.S. & M.S. R.R.

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Physicians desiring to experiment may obtain from Armour & Company samples of their preparations.

Messrs. Armour & Company showed at the Paris Exposition their Pepsin, Pancreatin, Thyroids, Suprarenal Capsules, Extract of Beef and Soluble Beef, and were awarded a gold medal.



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The Treatment of Headaches in the Phthisical

Owing to the irregular elevations of the body temperatures so characteristic of pulmonary tuberculosis, headache is not an infrequent symptom of phthisical patients. For the control of these neuralgias it is especially important that a remedy be selected which exerts no weakening action upon the heart and circulation, since these patients are very susceptible to drugs that have a depressing effect upon the vasomotor centers. An eligible remedy for these attacks of headache is hemicranin, which combines sedative and analgesic qualities with a stimulating action upon the circulatory apparatus. From the clinical evidence published it appears that hemicranin alleviates the pains by its direct action upon the nervous system and by its regulating influences upon the circulation. Owing to its eliminating effect it also promotes the excretion of the products of imperfect metabolism and of those toxic substances which are responsible in many instances for the development of neuralgias. Moreover, in phthisical cases this drug produces a gentle reduction of temperature which further contributes to its curative effect. The dose varies from five to ten grains on the average, and although larger doses may be administered owing to the innocuousness of the remedy, these are rarely required.

In all spasmodic affections of the respiratory passages no better remedy can be found than the inhalation of equal parts of Sander's Eucalyptal and Spirit of Chloroform. In croup the glottis relaxes at once; in diphtheria the fauces are thoroughly cleansed and the membranes expectorated; in asthma, chronic bronchitis and phthisis the respirations become tranquil and deep, and the harassing cough is relieved; influenza is positively aborted by it; 20 drops should be poured on boiling water and the vapor inhaled through a paper cane, or a stem-inhalation apparatus may be used. If we take care to obtain the genuine Sander's Eucalyptal no other treatment can compare with the above in regard to certainty of therapeutic action. Try it, Doctor; the result will please you.

J. L. Ridley, M.D., Huntersville, Ala., says: "I have used S. H. Kennedy's Extract of *Pinus Canadensis*, both White and Dark. I can frequently cure gonorrhea without any other remedy. I use either as an injection, and prescribe the Dark internally, where there is irritability about the mouth of the bladder. I have learned to regard it as a specific. In chronic cystitis I have derived great benefit from it, and in leucorrhea it relieves when many other remedies fail. It is a valuable remedy, and I have had marked success with it.

The Effect of Codeine.

The Medical Record (March 3, 1900) quotes the following from an article by Dr. G. J. Lochboehler in the Journal A. M. A. (December 2, 1899):

In epidemic bronchitis codeine is a valuable remedy for the relief of the harrassing pain of the cough, and when combined with one of the coal-tar antipyretics the analgesic effects become more pronounced. It is a favorite drug in the cough of phthisis and chronic bronchitis, and its sedative influence is highly satisfactory, clinical data having shown it to be the best succedaneum for opium. Another advantage of codeine over morphine derivatives and one of special value in bronchial affections, is that the patients not only cough less but also expectorate more easily than after taking any of the morphine derivatives. The cough-dispelling power of codeine is such as to make it indispensable in phthysical patients, and a point of great importance in these cases is that it does not impair the appetite or digestion, never produces nausea, and can therefore be used uninterruptedly for months. For the many bronchial and laryngeal neuroses, the exhibition of codeine in combination with antikamnia (antikamnia and codeine tablets) meets with well merited sanction.

Substitution as it Affects the Doctor.

Much has been written regarding the effects of substitution. However, we doubt if the physician has carefully considered how this evil directly affects him. For instance, if he has been in the habit of prescribing some well known and reliable remedy, from which he has derived most satisfactory results, there may possibly come a time during his experience, when the preparation seems to lose its former action. When this takes place he usually attributes it to deterioration of the remedy, or, the physiological condition of his patient. Yet, if an investigation were made, it would be found that some unscrupulous person had substituted an article, which he claimed was "just as good and cheaper." It is a well known fact among the pharmaceutical trade, that as soon as certain remedies have proven their value they are immediately imitated by other manufacturers, who hope to thus gain the benefit of the reputation and effort made by the manufacturer of the legitimate article. This point has been carried so far that certain manufacturers not only steal the ideas of the original manufacturer but boldly take for their own use the literature pertaining to the original article and substitute the

name of their own preparation in place of that of the article for which the communication was intended. This does not only show lack of originality on the part of the imitator, but it should be a warning to physicians that the goods manufactured by concerns of this kind are as unreliable and untrustworthy as their methods of doing business. We have at this time a particular case in mind. Owing to the popularity of Micajah's Medicated Uterine Wafers, which is based upon their therapeutic efficiency, a host of imitations have sprung up. These pirates not only use similar sounding names but boldly appropriate the literature pertaining to Micajah's Wafers, and insert their name in place of the original name. Caution should be exercised that in prescribing a uterine wafer, "Micajah's" should be indicated and not a substitute.

Treatment of Diabetes Mellitus.

Benson (The Dietetic and Hygienic Gazette) records a typical case of diabetes mellitus in a railroad employee aged 48 years. The patient had been ailing for some time and was under treatment for gastritis. For six months he had been failing in flesh and strength and at the time when treatment was inaugurated was voiding about sixteen pints of urine, specific gravity 1060 and containing a large quantity of sugar. Lithiated hydrangea was prescribed in teaspoonful doses every four hours and a diet restricted to gluten bread, fish, poultry, eggs, spinach, cabbage, string beans, milk and fish bouillon. As a result he improved rapidly. His urine gradually became practically normal in every particular. At the end of the third week of treatment only a trace of sugar was found. The patient returned to his work, but continued using only the anti-diabetic diet. Occasionally, when strongly tempted, he indulged in the ordinary dining car bill of fare and always suffered the consequences. In such event he promptly returned to the course of medical treatment prescribed and was always benefitted. When the report was made he was as fleshy and strong as ever, but was still using only gluten bread and occasionally taking a short course of lithiated hydrangea.

A bitter biting bittern
 Bit a better brother-bittern;
 And the bitten better bittern bit the bitter
 biter back,
 And the bitter bittern bitten
 By the better bitten bittern,
 Said, "I'm a bitter bittern-biter bit, alack!"



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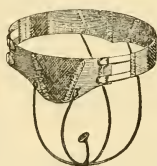
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Stringtown on the Pike, by John Uri Lloyd is announced by Dodd Mead & Co., to appear in book form in October, price \$1.50. It is a study of Northern Kentucky during the war and brings to view conditions that involved the people of that border state during the boyhood of the author. Of it, the talented writer, Judge J. Soule Smith, of Lexington, Ky., writes: "No such vivid landscape painting of Kentucky seasons and Kentucky scenery is to be found in any other book." The New York World states that it "reminds one of the figure in American literature cut by physicians, from Dr. O. W. Holmes to

Dr. Weir Mitchell and Dr. W. A. Hammond," and in this same line of thought the American Journal of Pharmacy, states "Our faith in American literature is strengthened by the entrance into it of professional men like Weir Mitchell and John Uri Lloyd."

The Mississippi Medical Record is offering to its subscribers a Clarke & Roberts No. 80, \$100.00 surgical table for the best original essay on any medical or surgical subject. Contest closes April 1st, 1901. For particulars, write to the Mississippi Medical Record, Vicksburg, Miss.

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Rectal Alimentation.

Edsall points out the insufficiency of rectal alimentation in keeping up the nutrition of the body, and illustrates it with a carefully observed case. He does not wish to say that it is of little value, for it is sometimes our only resource, but it is only an unsatisfactory makeshift at best by which we can temporarily reduce tissue loss and tide a patient over a period during which the stomach is becoming equal to reception of food, or who is being prepared for operation for removal of mechanical difficulties interfering in taking food by the mouth.—*Four. A. M. A.*

A new development in the meat trade is promised us, it having been discovered that it is possible to preserve meat by keeping it in sterilized air, or in a special chamber. If this means that the air is sterilized by heat or by filtration, or some such innocuous process, this is good news, for it would be proof that the meat was clean and in good condition when it entered the chamber. If, on the other hand, the "sterilized air"

means air rendered poisonous to flies, microbes, and other destructive creatures by air of chemicals, then we do not feel drawn to it.—*Hospital.*

According to Herr Reinmann, there is no relation between rancid paste and the odor of butter and the quantity of free acid found in it. The greater the amount of caseine and of milk sugar in butter, the more quickly does it become rancid. It does not appear that light and air exercise any direct influence upon the process. Butter made from sterilized cream will rarely become rancid, but if brought into contact with rancid butter it will turn in a few days.—*Scientific American.*

St. Peter—"And who are you?"

Candidate—"I am a medical man."

St. Peter—"Did you take a medical journal?"

Candidate—"Yes."

St. Peter—"Did you pay for it?"

Candidate—"No."

St. Peter—

The Charlotte Medical Journal.

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CHARLOTTE, N. C., NOVEMBER, 1900.

No. 5.

The Treatment of some Forms of Gastro-Intestinal Derangement.*

By W. Hosea Moss, M.D., Charlotte, N.C.

I invite your attention to the treatment of some forms of gastro-intestinal derangement, although the subject may appear trite and commonplace. However, I have chosen it because of the frequency with which the affections included in it are encountered in general practice. The ordinary ambulant patient presents symptoms, as a rule, rather of a functional than of a grave organic character, and while the treatment is not always satisfactory, it is sometimes attended with results almost brilliant. For ordinary practical purposes we may consider the most common forms of derangement of the intestinal tract, as catarrhal conditions, involving more especially the stomach on the one hand, or the intestines on the other, but more commonly both conjointly. Let us then begin with the consideration of the catarrhal conditions of the stomach, gastric catarrh, acute, sub-acute, or chronic. I prefer to use these designations, leaving out of consideration for the present the forms of acute inflammations of one or several coats of the stomach,

The conditions that give rise to a catarrhal state of the stomach are almost without number. The commonest comprise inadequacies or excess as in quantity or imperfect or unsuited quality of the food, extremes of temperature of ingested material, haste in eating, with improper mastication and bolting, irregularity in the hours of taking food, the ingestion of too large quantities of liquid with meals, and certainly not always traceable, reflex influences. As intimated, the symptoms may appear in acute or sub-acute or a chronic form. They are likely to be acute when due to some intensely exciting and unusual cause, sub-acute when the cause is less intense and more customary, and chronic when the abuses have been long persisted in, and either are slight in character or a certain tolerance to their irritation have been established.

The symptoms in these several conditions vary more largely in degree than in character. The most common are nausea, vomit-

ing, heaviness after food, more or less protracted, abdominal distension, eructations, regurgitation of liquids, sometimes pain, coated tongue, offensive breath and bad taste in the mouth. Sometimes there are in addition headache, disturbed sleep and vertigo. Rarely, if ever, are the symptoms, as well as the lesions, confined to the stomach. As a rule the intestines shares in the disturbance, the same influence acting by continuity of structure. When the intestines participate notably in the affection, there are added increased distention and flatulence, borborygmi, pain, constipation, or diarrhea, together with an aggravation of the systemic and constitutional manifestations. The symptoms are ascribable, speaking in a general way, to interference with the normal secretions of the parts, to the excitation of morbid secretions, to deranged motility and to fermentative processes in consequence of inhibition of normal digestion, and the activity of micro-organisms of various kinds. The local manifestations are due to the changes directly occurring within the digestive tract, the constitutional symptoms to the absorption of obnoxious agents generated as a result of this morbid activity. The derangement of the functions of the stomach and bowels is further attended with derangement of function in the related glandular apparatus, the liver and the pancreas. These several changes must be constantly borne in mind in the management of a given case, and in the selection of the appropriate remedies.

In any case the removal of the recognized cause is, as a general principal, to be effected. Much good will be accomplished by insistence upon both general and local rest. If the conditions be due to atonicity, stimulating remedies will be indicated; if, on the other hand to over-action and irritability, sedatives.

Let us first consider the most acute cases. After the ingestion of an unduly large meal, containing perhaps food of an indigestible character, the patient may be seized with nausea, vomiting, pain and other symptoms already detailed. If the contents of the stomach have not been entirely rejected this evacuation is to be encouraged, either by the ingestion of tepid mustard water or the introduction of the finger into the

*Read before the Charlotte Medical Society.

throat or by the administration of say 10 grains of powdered ipecac or of the subcutaneous injection of about 1.6 gr. apomorphia. In suitable cases the stomach tube may be employed for this purpose. The patient is to be kept in bed in a cool, dark, quiet room, permitted to suck bits of ice to allay thirst, and if there be pain, turpentine stupes, a mustard plaster, of some form of dry heat applied to the abdomen, and small quantities of milk from 4 to 6 ozs. administered about every three hours. This last is best given boiled and with the addition lime water, one or two tablespoonfuls to each glass. If there be constipation as there may be, this may be relieved by an enema of simple hot water and soap suds, or with the addition of an oz. of sweet oil or castor oil. If there be diarrhœa which does not yield to the use of boiled milk and lime water, bismuth in some form may be employed; the sub-nitrate I consider to be the most potent form, in doses of twenty grains every three hours. Salol may be given in doses of from 3 to 5 grains, every three hours. Opium in any form would only be required if the irritability were intense and associated with great pain. For the pain codeine often proves efficacious, if vomiting be excessive cocaine in doses of from an eighth to a quarter of a grain, or serium oxalate, in doses of 5 grains may be employed. Cases like that just cited are ordinarily manageable if the primary irritation has not been of inordinate intensity, and if the general and specific measures indicated are capable of execution. But acute cases of such intensity are, as a rule, not seen in ordinary ambulant practice. In these conditions the cases are almost all of a sub-acute or chronic character. For a case of this kind in which there exists, let us say, nausea with little or no vomiting, with distress after food with eructations and constipation, I should give preceding nourishment, a powder containing from 1-12 to 1-10 of a grain of powdered ipecac, from 1-6 to 1-5 grain of mercurous chloride, and from 2 to 5 grains of sodium bicarb, repeated at intervals of about three hours, at the same time restricting the diet as nearly as possible to milk. In this instance, uncooked, if palatable, and without lime water. Recovery would here also be favored by rest in the recumbent posture. In accordance with the degree of constipation, a saline laxative, such as magnesium sulphate, or potass. and sodium tartrate, or sodium phosphate, teaspoonful or more may be administered at the outset or on the following morning, or even three or more times daily. Relief will often follow these simple measures, but the morbid tendency has

yet to be removed. The solution of the problem lies in the regulation of the diet, the direction of suitable exercise, adjustment of the mode of living, and the administration of a prescription containing from 3 to 5 drops of nitro-hydrochloric acid and from 7 to 10 drops of tr. Nux-Vomica, well diluted before each meal. (As it is explosive under certain conditions some care must be exercised in the preparation and preservation of this combination). If constipation be a troublesome feature, it may be overcome by the continued administration for a variable period, of a minimum quantity of sodium phosphate, in a generous amount of hot water before each meal until it insures one daily evacuation of the bowels. Given in this way, the phosphate acts as a detergent, as an antacid, and as a gentle laxative, and is often capable alone of effectually relieving many mild cases of gastro-intestinal catarrh. If in such a condition of chronic gastro-intestinal catarrh a more stimulating laxative be required, I prescribe the following combination which I have found of extreme utility: Aloin from 2 to 3 grs., Tincture Nux-Vomica, Tincture Belladonna, Tincture Physostigma áá 2 drachms, Fl. Ext. Cascara 4 drachms, of this mixture is to be taken thrice daily before meals, the smallest quantity, usually 20 to 30 drops at first; that is sufficient to secure a daily evacuation of the bowels, and this dose is gradually reduced drop by drop until the habit of a daily unaided movement is established. If for any reason it seems desirable to add to the tonic qualities of this formula, the total quantity may be brought up to 3 ozs. by the addition of a sufficient quantity (1 1-2 oz.) of Fluid Ext. Erythroxylon. If pain, referable to the digestive tract, be a source of complaint, the Fl. Ext. or the Tr. of Cannabis indica may be added in doses of 5 drops of the former and 10 drops of the latter. In a word, the prescription may be modified or amplified in various ways to meet specific indications. If in connection with intestinal catarrh, diarrhœa be a conspicuous manifestation, that is to be overcome by various measures, the simplest of which is first employed; for this purpose bismuth subnit in large doses, 30 grs., or Salol in doses of 5 grs. may be employed. I have, however, not found these so successful as an astringent combination consisting of extract of hæmatoxylin 5 grs. arom., sulphuric acid from 5 to 10 drops and paregoric sufficient to make a teaspoonful given every two or three hours if the bowels are moved that frequently, the interval being regulated by the frequency of the bowel movement. In some in-

stances the irritability is so pronounced that either a small liquid movement or an ineffectual effort at stool follows the ingestion of anything whatever, liquid or solid. In these instances I find the administration of from 2 to 5 drops of the deodorized Tr. of opium with 2 or 3 drops of the official solution of potass. arsenite to act most happily. Sometimes such an irritable condition is associated with the presence in the bowels of large amounts of dry and impacted fecal matter. Under these circumstances large enemata afford the greatest relief. In cases in which, by reason of a sense of heaviness after food, long protracted, with the presence in the evacuation of undigested food, there is reason to believe that pepsin is deficient in the gastric secretions, the administration of the official solution of pepsin answers a useful purpose. In some cases palpitation of the heart is an extremely distressing manifestation, and auscultation may disclose cardiac arrhythmia. This as a rule yields to the administration of either strychnia or Nux-Vomica, alone or combination with a mineral acid. Rarely, it will be found necessary to administer for a brief period digitalis in sufficient quantity to regulate the action of the heart which is disturbed largely by the pressure exerted by the distended stomach and probably in part also by reflex action on the Pneumogastric nerve. In many cases of intestinal catarrh, particularly in those who lead an inactive life or are of sedentary habit, anemia is perhaps the most striking feature. In these cases, of course, hæmetinics may be indicated, but they will prove of little service if the constipation be not relieved. Under such circumstances the most satisfactory course to pursue is the administration of a saline before meals, and iron in easily assimilable forms after meals. A pill containing equal parts of potass. carb. and ferric sulph. 1 to 3 grs. each, or Tr. of Ferric Chloride, in doses of from 15 to 20 drops, may be given after meals. In some of these cases in which the anemia fails to yield to other remedies, I have found improvement to follow the administration of some intestinal antiseptic, and more especially of creosote, given for, if necessary, long periods of time, in doses of from five to ten or even twenty drops after meals in a glassful of milk. I have thus far dwelt more particularly upon the medicinal treatment of the affections under consideration. This, perhaps, the least important part in the care of these cases. In the majority the conditions are induced by carelessness or indiscretions in diet, either from indifference or lack of knowledge, and in many cases per-

manent relief as well as future avoidance is to be secured only by careful regulation of the mode of eating and the character of the food. In general, I instruct patients of the several classes considered in these remarks, to take their meals regularly at stated hours, to abstain from tea, coffee, tobacco, alcohol, pies, pastries, cakes, fresh bread, hot biscuits, sweets, and fried food, and to avoid an excess of starchy food, that is capable of fermentation, and the ingestion of large quantities of liquids at meals. I advise the taking of milk in abundance, to be slowly sipped and not gulped down, eggs, soft boiled or poached, or if not otherwise tolerated, even boiled hard and chopped up fine and mixed with butter and salt, meat, preferably beef, rather undone, chops well prepared, oysters, raw, broiled or stewed; green vegetables, and stewed or fresh ripe fruit. Finally, I instruct these patients to take exercise systematically, preferably out-of-doors, in the form of walking, riding, bicycling, or other kind of not too violent a character. A sufficiency of sleep is also to be insured. Not less than 8 hours, and preferably 9 or more hours are to be insisted upon. As a tonic a tepid bath daily, followed by a cold sponging and brisk rubbing with a rough towel, is also advised. In a majority of instances success will follow the pursuance of the lines of treatment here laid down. In the minority the cases will resist all medicinal and dietetic treatment and resort must be had to the stomach tube and lavage. As to this means of treatment, however, my experience has not been sufficient to justify me in speaking with any degree of positiveness, but that it is capable of much good I am very confident.

Hemoptysis and Treatment.*

By James A. Burroughs, M.D., Asheville, North Carolina.

True hemoptysis is hemorrhage somewhere between the larynx and the alveoli. It is not a disease but a symptom of a pathological condition; it occurs very infrequently from the larynx and trachea, save in a slight oozing from an ulcerated or congested mucosa which is readily located.

Ninety-nine per cent. of hemoptysis is from the bronchi or lungs, and approximately the same per cent. is due to tuberculosis. The mucous membrane of the bronchi becomes relaxed and the little blood vessels at this point develop a weak-

*Read before the Buncombe County Medical Society.

ened condition, prone to fatty changes, due to the tubercle bacilli.

Hemorrhage from the lung is produced by a deposit of tubercle bacilli in the alveoli, which causes capillary oozing, and later, hemorrhage from rupture of dilated blood vessels of the necrotic mass which have been weakened by the fatty changes.

Hemorrhage from any vessel of the extremities is easily controlled; the abdomen is opened and re-opened, and bleeding point secured; the brain surgeon of to-day unhesitatingly trephines the skull and ties a ruptured artery, but the anatomical construction of the thorax with its vital organs is such as to debar the surgeon from entering its domain for such a purpose, hence our treatment for pulmonary hemorrhage can never be radical, but ever remain expectant or palliative. It is clear that the surgeon does not dare to practice his art in this territory for this particular trouble and that the management of pulmonary hemorrhage will be left to the good judgment (sometimes called skill) of the general practitioner.

Old nature has been termed by some one "a poor surgeon but a good physician," but in pulmonary hemorrhage nature's means of arresting hemorrhage proves her a good surgeon when the vessel is small, other things being equal. Nature contracts and retracts the vessels with a strong disposition to form a thrombus; the patient assumes the recumbent posture as by instinct, the hemorrhage ceases perchance, permanently or to reoccur with a like effort on the part of nature to close the rent. A very large per cent. of pulmonary hemorrhages are provided for in the above way without the assistance of a physician; we have all been called to cases of hemorrhage when the hemorrhage had ceased by nature's hemostatics. This is all very good, but we feel a hesitancy in leaving a subject without doing something or giving some advice because we know how frail the mass that chinks the rent and that with the least increase of blood pressure nature's efforts to repair will be dislodged and the red current of life will again flow to the horror and dismay of relatives and friends.

Treatment of pulmonary hemorrhage is properly divided into palliative and preventive. By palliative treatment we mean to place the lungs in a most favorable condition for nature to apply her hemostatics; respiration is accomplished more easily and slowly in the recumbent posture than in any other, and for this reason added to the fact that the heart's action is less labored when the body is horizontal, this is the most favorable to thrombus, the length of

time this position should be retained is in the discretion of the physician.

Morphine and atropine subcutaneously are the only drugs to which we can look to for help with any hope of relief. Morphine lessens the number of respirations and quiets the sympathetic nervous system, and with the atropine relieves the mental fear and assists and allows the heart to act in its smoothest and most quiet manner, while the thrombus in the broken artery is undergoing organization.

Nothing except a light, scant, liquid diet should be administered during a series of hemorrhages and for at least three days after cessation of last fresh oozing; digestion of food requires more work for the heart and will have a tendency to aggravate and prolong the trouble by increasing arterial tension. The entire portal circulation should be unloaded by a large dose of calomel, followed by a brisk saline; in the free catharsis there is a revulsive action from the lungs which is even more noticeable than in pneumonia; crushed ice in quantities by the mouth is grateful to the thirsty patient, and besides its caloric effect upon the stomach and sedative action upon the pneumogastric nerve, seems of rational utility.

Several remedies, commonly employed at first, are not only valueless but tend to promote hemorrhage, I refer particularly to ergot, digitalis and the ice bag or poultice; ergot increases vascular tension, digitalis produces the same effect particularly upon the pulmonary arteries, the ice poultice contracts the peripheral vessels and causes engorgement of the deeper vessels.

One of the most practical and reliable means of controlling pulmonary hemorrhage is a mechanical measure; I refer to the time-honored cording of the extremities; this was first practiced by Hippocrates, with him and his followers, until Harvey's elucidation of the circulation, it was imperialistic practice. With an elastic or piece of domestic sufficiently tightened on the extremities, near the trunk, to prevent a return of venous blood to the body and yet not sufficiently tight to interfere with the arterial circulation, has frequently checked, in my hands, a profuse hemorrhage, when all other means used had failed. Apply the elastic to large extremities, first using a small compress over the femoral vein and frequently an alarming and seemingly refractory hemorrhage will cease before the upper extremities receive attention, sometimes ceasing with the cording of one leg; it is a source of regret and wonder that this most scientific and valuable mechanism is

not more frequently resorted to as it is so simple and often so efficient.

Sometimes pulmonary hemorrhage does not yield to any treatment, and the patient continues to bleed on and on. We have all had these cases, and I am free to state that I have lost three lives that might have been prolonged or saved, had I practiced transfusion of blood or subcutaneous injection of normal salt solution; the salt solution can always be procured in a few moments and all that is necessary is an aspirating needle attached to a thoroughly sterile fountain douche bag, insert the needle under the skin into the cellular tissues in the infra-scapular or gluteal region and elevate your bag some two feet above the patient, greater elevation of bag will not facilitate the absorption, but may rip up the cellular tissues so as to retard the process; it is remarkable how quickly the solution is taken up and correspondingly how quickly a dying patient returns to life. I have seen this measure succeed in several instances when I was positive death would have claimed the victim in a very short time. Last June I was called to a male patient who had lost by actual measure ten pints of blood, not taking into consideration quite a little that was lost on towels and bedding, this patient was still bleeding with almost an imperceptible thready pulse, pale and cyanosed, with the death damp upon his brow. In this case the usual hypodermic of morphia and atropine was administered, adding 1-50 gr. of nitro-glycerine; an aspirating needle was quickly lashed to the tube of a douche bag and in the course of forty-five minutes the cellular tissues had taken up half a gallon of salt solution and my patient was better. In three weeks he was on his feet and is now within a few pounds of his normal weight. His life was saved by the injection of the normal salt solution, giving the heart something to contract upon. In this day of enlightened medicine we should very rarely, if ever, lose a patient from pulmonary hemorrhage, notwithstanding that we are debarred from entering the chest and applying the ligature to the bleeding vessel as is done in every other portion of the body.

The treatment which applies to the prevention of pulmonary hemorrhage evolves into the treatment of pulmonary tuberculosis and will be omitted from this discussion.

DISCUSSION.

Dr. Fletcher.—I think ice over the chest is sometimes beneficial. Hypodermics of morphia and atropine are the best internal

remedies for controlling hemorrhage from the lungs.

Dr. Dunn.—I think the ice bag should increase the hemorrhage. I have never seen a patient lose ten pints of blood. In almost all cases we get as good results by using normal salt solution in the bowels, often avoiding death in this way.

Dr. Minor.—Dr. Burroughs wisely recommends subcutaneous injections of normal salt solution in these cases of profuse hemorrhage, but I think we get quicker and more satisfactory results by using it intra-venously. The same quantity in the median basilic vein is more quickly and easily absorbed. The drug of all drugs is atropine in heroic doses, gr. 1-20 to 1-30. It does not have the ordinary physiological effect, but does stop bleeding. I doubt the loss of ten pints of blood. Most patients would die from this. The nurse must have made the mistake.

Dr. Burroughs.—I measured the blood myself.

Dr. Battle.—I have never seen such profuse hemorrhage. The doctor must have been mistaken. The ice bag does not give good results as a rule. Intra-venous injection is the only method I have employed with the salt solution.

Dr. Reynolds.—I believe nature does most of the work before the doctor gets to his patient, and often our patient is dead. Morphia to quiet the nervous system and atropine to control the hemorrhage are our best drugs.

Dr. Reagan.—Ice on the chest has the effect of slowing the heart's action. The best results are obtained by placing the patient in splints, so to speak, and taking all the pressure possible off the lungs.

Dr. Sawyer.—I get the best results from atropine in large doses, gr. 1-50 to 1-60, and repeat in half an hour if necessary. I do not approve of digitalis and ergot.

Dr. Pearson.—The point Dr. Reagan brought out is a good one. I have used adhesive strips for this, and find if you can keep the chest at rest, the patient is much less liable to hemorrhage. I think the ice bag on the chest and morphia and atropine are valuable measures.

Dr. McBrayer.—In regard to the quantity of blood lost by Dr. Burroughs' patient, will say that I was called to see a man who was having a profuse hemorrhage, and this man had lost over a gallon of blood, but he was dead before I got to him.

Lots of good work is done for spite and a real enemy may keep a man from being lazy.

Renal Calculi, with Report of Cases.*

By Stuart McGuire, M D., Professor Principles of Surgery, and Clinical Surgery, University College of Medicine; Surgeon in Charge St. Luke's Hospital; Visiting Surgeon Virginia Hospital, Richmond, Va.

Stones in the kidney are formed by the precipitation of the salts of the urine, and may be composed of urates, oxalates or phosphates. They vary in number from one to one thousand, and in size from a few grains to several ounces. They are usually formed in the pelvis of the kidney, but occasionally develop in the substance of the organ. They are irregular in shape from restricted motion and absence of attrition, and are frequently moulded to represent casts of the cavity in which they are contained. Renal lithiasis is supposed by most writers to be due to an hereditary or acquired diathesis, from the frequency with which stones are found in different members of the same family, and from the predisposition which lithemia, oxaluria and phosphaturia seem to give to the disease. The most recent investigators, however, are inclined to the view that they are due to bacterial infection.

A stone may exist in the kidney without producing symptoms and then is termed an unsuspected calculus. It may at one time give trouble and later become fixed or imbedded and cease to annoy the patient, and then is termed a quiescent calculus. It may by its constant and abortive efforts to escape cause frequent and atrocious pain, and then is termed a migratory calculus.

A renal calculus may cause no local irritation or constitutional symptoms. It may change its position so as partially to obstruct the outflow of urine and thus cause gradual dilatation of the kidney, or hydronephrosis. It may suddenly and completely block the ureter, resulting in atrophy of the kidney, and, if the other organ has previously been destroyed, cause retention of urine, or anuria. It may by constant mechanical irritation lessen the resisting power of the kidney and result in suppuration from infection either through the blood stream, or by continuity or contiguity of tissue. If the pelvis of the kidney is involved it is termed pyelitis; if the parenchyma, it is termed pyelonephritis; if the adjacent tissue, it is termed perinephritis. If the kid-

ney is converted into a pus sac it is called pyonephrosis.

With the foregoing introduction we take up the diagnosis and treatment of renal calculi, a subject of great importance owing to the frequency of the disease, the horrible suffering it causes, and the importance of its early recognition in order that appropriate measures may be applied before irremediable complications follow. I shall endeavor to show that when a stone is known to exist in the kidney an operation should be done for its removal, not as a last resort to save life, but as an early effort to save the organ. For an early nephrolithotomy—or incision of a healthy kidney for the removal of a stone—entails little risk, gives permanent cure, and is not attended by mutilation; while a late nephrectomy—or removal of a hopelessly diseased kidney from destructive changes due to suppuration or distention—is followed by high mortality, frequently persistent and annoying fistulæ and the sacrifice of an important organ.

The diagnosis of renal calculi is sometimes extremely difficult to make, as there may be absence of several of the so-called cardinal symptoms; or the symptoms may be referred to another organ; or the symptoms of another disease attributed to a stone. Often a calculus has caused the death of a patient and been found in the post-mortem without its presence being previously diagnosed, and often a kidney has been opened for suspected stone without one being found to confirm the diagnosis.

The symptoms caused by a stone in the kidney are due rather to obstruction than to the actual presence of a foreign body, and hence depend more on its position than on its size or shape. They are pain, the passage of fragments of calculi, the presence of crystals, blood and pus in the urine, frequent and urgent urination, and irregularity in the quantity of urine passed, varying from complete anuria to marked polyuria.

Pain accompanying renal lithiasis may be due to fresh deposits of salts on the calculus, or to pressure on the kidney from the passage of gas in the colon, or to the engagement of the stone in the ureter and its effort to escape. The pain may be one of two types; either a more or less constant dull ache or feeling of weight and tension in the lumbar region of the affected side, which is markedly increased by exercise; or acute but intermittent paroxysm of pain, radiating in the direction of the bladder, which is typically seen in the condition known as kidney colic. Tenderness, or pain due to pressure is also usually observed. It may be

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elicited by palpation over the kidney and ureter. Attention has been called to a peculiar stabbing pain which is sometimes produced by percussion.

The passage of fragments of calculi is a symptom usually wanting, but when present, is of great diagnostic importance. The frequent and persistent existence of certain crystals in the urine also gives indication of the presence and character of the stone.

Hematuria is usually slight, paroxysmal and transitory. It is due to the mechanical action of the rough stone on the delicate structure of the kidney. It is usually microscopical in quantity, but is markedly increased by riding, driving, dancing or renal palpation. It always diminishes or disappears under complete rest.

Pyuria, or pus in the urine, is merely indicative of infection of some part of the urinary tract. There is no way to tell from the appearance of the corpuscles the origin of the epithelial cells that formed them unless they come from the actual secreting cells of the kidney itself. Pus in sharply acid urine indicates a renal origin.

Frequent and urgent urination, often seen with renal calculi, is reflex from irritation of the kidney or ureter. It has been noted that while it may be troublesome in the day it is usually relieved at night.

Irregularity in the quantity of urine passed is due either to reflex influences or to purely mechanical causes. Physiological stimulation or inhibition will increase or diminish the amount of urine passed, and the obstruction of the ureter by a calculus, especially if intermittently affected, will have the same effect.

The value of the Roentgen Ray in determining the presence or absence of stones in the kidney is now being widely discussed. Some experimenters claim that a skiagraph gives definite positive or negative evidence. Others state that it is unreliable as it sometimes fails to show calculi that are known to exist, and sometimes apparently shows the presence of calculi when they are afterwards proved to be absent. The difficulties to be overcome are the thickness of the trunk, and the lack of marked difference in the opacity between the soft tissues and certain varieties of calculi. The pictures obtained are rarely clear, and there is a personal equation in the way they are construed. The day will undoubtedly come when the X-Ray will be used in cases of suspected renal calculi with the same mathematical precision it is now employed in injuries of bone and the location of bullets, but for the present, except in

rare cases, the work can only be done satisfactorily by a very few experts.

As has been stated, in many cases of kidney stone it is impossible to make a positive diagnosis despite a careful study of the history of the patient, a prolonged and painstaking observation of the symptoms, a rigid and exhaustive chemical and microscopical examination of the urine, and repeated skiagraphs of the trunk. An exploratory operation is justifiable, however, if inflammation of the kidney or its pelvis develops; if the patient suffers from frequently repeated attacks of kidney colic, or if the pain is severe and intolerable. Under these circumstances intervention is safe and precautionary; delay is dangerous and risky. It is true a stone may not be present, but some other pathological condition will be found which equally demands correction. Henry Morris, of England, reports having operated on forty-four patients for renal calculi without finding a stone. He objects to the term "negative exploration" being applied to these cases, and forcibly says: "It is not a 'negative' result to find and excise commencing foci of tuberculous disease; to fix a misplaced or freely shifting kidney; to open and scrape away half a dozen small abscesses or suppurating cysts; to excise a solid renal or perirenal tumor or tense cyst; to discover and give exit to blood extravasated beneath the fibrous capsule, or pent up within the cavity of the kidney; to liberate a kidney hampered by tough adhesions due to perinephritis provoked by sprain or other injury or disease; or to detect and divide an ureteral stricture or obstructing valve. Yet these are some of the conditions which have been met with in the search for stone in the kidney and in many instances have been most successfully cured."

The nature of the operation necessary for the relief of renal calculi depends on the pathological changes which have ensued in the kidney. If the stone has not caused infection with suppuration, or produced obstruction with dilatation, then nephrolithotomy, or simply opening the kidney, removing the stone, with suture of the renal incision and closure of the lumbar wound is all that is necessary. If the stone has caused suppuration and there is pyelitis or pyelonephritis, or if the stone has caused obstruction of the ureter and there is hydronephrosis or pyonephrosis, then either nephrotomy or nephrectomy must be done. Nephrotomy consists in opening the kidney, removing the stone and then draining the renal cavity through the incision in the flank. Nephrectomy consists in the complete removal of the kidney. It may be

done by either the lumbar or abdominal route, the choice being determined largely by the size of the tumor.

In place of giving a "text-book" description of these operations I will briefly report four cases I have recently had, three at St. Luke's Hospital and one at the Virginia Hospital, as they beautifully illustrate the subject.

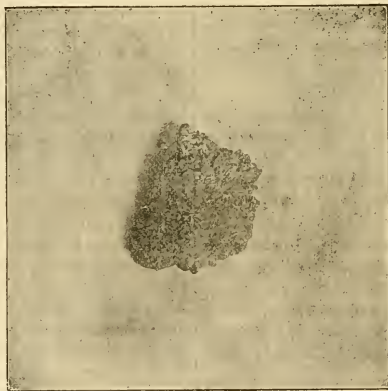
CASE I. Nephrolithotomy for calculus uncomplicated by infection or obstruction.

Mrs. L., aged 32, for the past two years had suffered with a constant ache in the right lumbar region, and on three or four occasions had acute attacks of pain simulating nephritic colic. Clinical symptoms pointed to a calculus in the kidney, and the urine, which was strongly acid, showed a small amount of albumen, a large quantity of pus, and the constant presence of renal debris. Two separate attempts were made

tion and anchored by several silk sutures and the wound closed, with gauze drainage at its most dependent point. Recovery was uneventful, the only untoward symptom developed being pain due to passage of blood clots from the pelvis of the kidney to the bladder. A recent examination of the urine shows that pus has disappeared and the patient is well. The stone, in size, shape and appearance, resembled an Indian arrowhead, and was composed of an uric acid nucleus around which had been deposited oxalic salts.

CASE II. Nephrotomy for calculus followed by infection and suppurative perinephritis.

Mr. B., aged 28, came of a rheumatic family and had suffered in past years from several attacks of kidney colic. He gradually lost strength and flesh and finally took his bed with symptoms too indefinite to admit of a certain diagnosis. He was



Case I.—Stone removed. Actual size.

to get a skiagraph of the kidney, both times with unsatisfactory results. Despite the uncertainty of the diagnosis the patient consented to an operation. An incision was made parallel with and an inch below the last rib, beginning three inches from the spinous processes of the vertebræ and extending forward and outward some five inches. The kidney was readily reached, loosened from its fatty attachments and delivered through the wound. Palpation and an exploratory puncture with a needle located a stone in one of the calices. This was removed through an opening made in the convex border. Examination of the ureter was negative. Bleeding was slight and easily controlled by deep and superficial sutures. The kidney was returned to its proper posi-

tion and anchored by several silk sutures and the wound closed, with gauze drainage at its most dependent point. Recovery was uneventful, the only untoward symptom developed being pain due to passage of blood clots from the pelvis of the kidney to the bladder. A recent examination of the urine shows that pus has disappeared and the patient is well. The stone, in size, shape and appearance, resembled an Indian arrowhead, and was composed of an uric acid nucleus around which had been deposited oxalic salts.

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permit of thorough examination, drainage was inserted and he was hurried to bed. The wound drained unmeasured and incredible quantities of pus; wild delirium set it and for days his recovery was deemed hopeless. Finally he began to rally and the first evidence of consciousness was complaint with his bladder. An old and tight stricture of the deep urethra prevented the introduction of a sound, but tenesmus was so frequent and violent that from the history of the case it was apparent the calculus had entered the bladder. A supra-public cystotomy was done and a stone about the size of a cherry seed found and removed. Recovery afterwards, though slow, was uneventful. The lumbar and supra-pubic wounds healed without a fistula and the patient ultimately gained over forty pounds in weight. Though now apparently in good general health at times he still suffers with paroxysmal pain in his back, followed by profuse pyuria, and it is recognized that he has pyonephrosis with occasional relief by drainage through the ureter into the bladder. A second operation is indicated to complete his cure.

CASE III. *Lumbar nephrectomy for calculi followed by infection and destructive pyelonephritis* Mrs. P., aged 39, suffered

some ten years ago with repeated attacks of kidney colic. Two years ago an abscess formed in the region of the right kidney, pointed in the flank and was opened by her local physician. Both urine and pus drained freely, at first, but later only pus escaped. At the time of her admission to St. Luke's Hospital there were two fistulae, one over the kidney and the other over the dorsum illi. The patient was greatly emaciated from constant suppuration, and suffered so greatly that morphia had to be given regularly and in large doses. Repeated and careful examinations of the urine failed to detect any abnormality in either its quantity or quality. It was believed that the kidney had been practically destroyed and had ceased to perform its function, and it was, therefore, determined to remove it. An incision was made first parallel to the outer border of the erector spinæ muscle, beginning just below the twelfth rib and extending to the crest of the ilium, and then turned sharply out for several inches in the direction of the umbilicus. The triangular flap thus made was dissected back, exposing a large dense cicatricial mass which completely invested the kidney like the thick hull of a cocoanut. So firmly adherent was it to the kidney that it was found

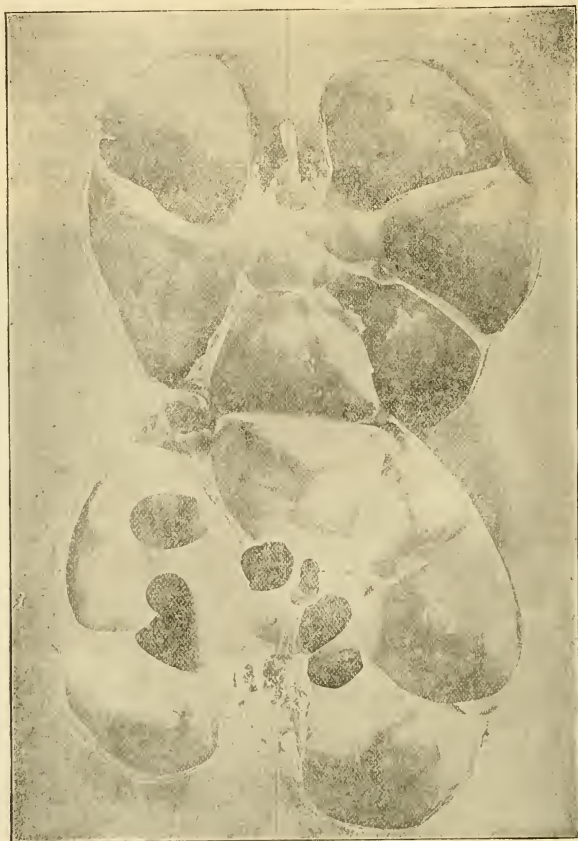


Case III.—Pyelo-nephritic Kidney filled with Calculi.

impossible to peel it from its bed or to separate the mass from the surrounding tissues. With a sharp scalpel the mass was dissected out until the vessels which formed its pedicle were reached. These were ligated and divided, all hemorrhage was stopped and the wound lightly packed with gauze, the ends being brought out at the angles of the wound for drainage. The incision was closed with interrupted sutures of silkworm gut and the margins approximated with a continuous suture of silk. Drainage from the large infected area at first was very profuse, but gradually grew less and finally stopped, leaving a neat, clean scar. The improvement in the patient's general condition was rapid and marked. Morphia was soon discontinued and weight increased over ten pounds in the six weeks stay in the hospital. The

kidney, on section, was found to be filled with stones and completely infiltrated with pus. Its function had evidently long since ceased. The stones were all of the phosphatic variety and blocked the pelvis and ramified like branches of coral into the calices of the kidney.

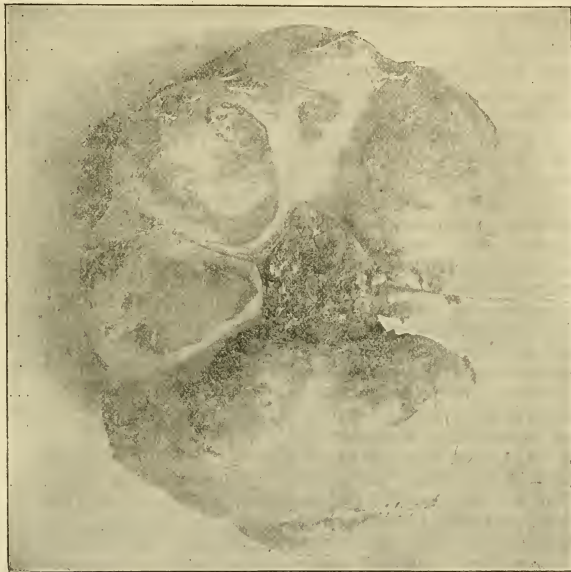
CASE IV. Abdominal Nephrectomy for Calculus producing Ureteral Obstruction and Hydronephrosis. Miss W., aged 23, had a history of attacks of severe pain in the abdomen eight years ago, which was followed by the slow formation of a lump which had gradually increased in size until now it produced considerable deformity. Urinary examination was absolutely negative. Physical examination showed a movable, fluctuating tumor in the lower left part of the abdomen. It was about the size of



Case IV.—Hydro-Nephrotic Kidney opened.

a child's head and was thought to be either an ovarian cyst or a distended kidney. An accurate diagnosis being impossible an exploratory operation was advised. An abdominal incision was made in the left linea semilunaris over the most prominent part of the swelling and the tumor at once presented itself. It was found to be covered by the posterior layer of the peritoneum, and was known to be the kidney. The peritoneal covering was divided and the tumor rapidly freed from its bed, brought through the wound and laid upon the skin

of the abdomen. Ureter was ligated, disinfected and returned to the cavity. The small pedicle which remained was tied in sections and cut off, and the abdominal incision then closed. The patient made an excellent recovery and is now in perfect health. The tumor was a beautiful illustration of hydronephrosis, due to occlusion of the ureter by an impacted calculus. The stone was only slightly larger than a garden pea and was lodged in the lumen of the ureter half an inch below the point of its emergence from the pelvis of the kidney.



Case IV —Hydro-Nephrotic Kidney un-opened.

Report of Fourteen Years' Work in Abdominal Surgery.

By F. F. Lawrence, M. D., D. Sc., Columbus, Ohio.

Our lessons in science, or in life, are learned only as the result of great labor, or great opportunities, or both. At best the satisfaction gained is dearly bought. The advantages of wealth do not always accompany an ambition to accomplish something in life. Its want often proves an insurmountable barrier, and yet again it may prove but fuel to the flame which generates the power to do. If there be aught in my work which will encourage others to greater

efforts I am content. The report herein is the complete record of my work in abdominal surgery for over fourteen years with the results. Only about one-fourth, or a little less than one-fourth of all my abdominal operations have been performed in hospitals, the others in patient's homes, which, owing to the fact that they were largely among the poorer classes, were in most cases very poor. In a large number these homes have been among the slums, in alleys, and in hovels of the poorest type.

For several years I carried out the most thorough of *antiseptic* methods. For almost six years past I have totally discarded all *antiseptic drugs* and devoted myself to the most rigid and scrupulous *aseptic* precautions. Aseptic, not only as regards pa-

tient, instruments, dressings, sutures, ligatures, etc., but asepsis most rigid as regards myself, my assistants, my nurses, and also spectators. The rule, to touch not, handle not, any unclean thing, if about to operate, has been rigidly enforced. Hence, no one who has during preceding forty-eight hours visited any form of infection, attended a post-mortem or dissection, is allowed to witness operations. And if one operation develops that which might, by any possible chance, prove a source of infection to another case, all other operations are postponed until at least forty-eight hours have passed. The results of this method, together with the adoption of a method, whereby I do not use an assistant to handle instruments and sponges, or to increase manipulation of the tissues, has resulted most satisfactorily.

In this report, no patient who has died within a month of operation, has been considered "a successful operation." Two of the fourteen deaths occurred, one five weeks after operation from uraemic convulsions. The other, four weeks after operation, as a result of syphilitic stricture of the bowel causing obstruction. The other twelve died in from two hours to a week after operation. The only cases, in which I have opened the peritoneum, that are not included in this report, are those of *radical cure of hernia*. These have been reported in another paper, hence I omit them from this report. Working with the handicap of no hospital accommodations for several years, and an unfortunate lack of financial support, I feel that the results are such as to justify a measure of pride, and further, to strongly support some statements I have frequently made in medical societies, viz.:

First. That thoroughness, cleanliness, rapid operating, short incisions, short anesthesia, and concentration of effort, when accompanied by careful study of our cases, proper preparation for operation and judicious after-treatment, will accomplish good results even in unfavorable environment.

Second. That the private home is to be preferred over the general public hospital for abdominal work.

Third. That a hospital constructed and conducted as a well ordained private home—i. e., private rooms only, a special nurse for each patient, and no cases other than those special cases treated, will result in still better work.

During the past fourteen years, I have kept a careful and most complete record of

each case. The following is the summarized result:

NATURE OF OPERATION.	Number of Cases Operated Upon.	Died.
Removal of tubes and ovaries for pyosalpinx, tubo-ovarian abscess, and tubercular affections of ovaries and tubes.....	223	5
Hysterectomy for cases of pyosalpinx complicated with abscess in uterine walls.....	8	1
Salpingitis—non-suppurative....	43	
Oophorectomy for { Cystic ovaries.....	39	2
{ Cirrhotic ovaries.....	12	
{ Haematoma of ovaries.....	9	
Ovarian { Cystic.....21 } tumors { Fibroid..... 2 } { Sarcoma..... 6 } { Dermoid..... 5 }	34	2
Hysterectomy for { Fibroids.....53 } { Cancer.....14 }	67	3
Extra—uterine pregnancy.....	26	
Appendicitis.....	49	
Intestinal obstruction.....	5	1
Strangulated Hernia.....	7	
Operations upon gall bladder....	10	
Totals.....	532	14

I have not included in this report any cases except those in which an abdominal incision was made and the peritoneum opened. Many cases of *pelvic suppuration* have been operated upon through the vagina.

In addition I have had several nephrotomies, and three or four nephrectomies, but these were not strictly abdominal operations, as they were extraperitoneal. Neither have I included the operations for radical cure of hernia, for the reason that I have reported them in a paper read before the Ohio State Pediatric Society in May, 1900.

Of my strangulated hernia cases, two were in men very well advanced in years; one being sixty-eight years old, the other seventy-four years, the latter was a soldier in the war of rebellion, and a prisoner in a Southern prison, had scurvy, and carries the scars upon his legs to-day. His hernia developed when he was in the war.

I have not refused operation in any case where the slightest hope of benefit could

be entertained. Many of these cases were most desperate. As an example :

Mrs. B., aet. 68. An immense multilocular ovarian cyst, weighing forty-one pounds. Intestines matted firmly to upper and posterior surfaces, adhesions to the liver and to the abdominal walls. Operated upon June 9th, 1888. Recovered.

Mrs. E. W. Another case of ovarian cyst of twenty years' existence. She had acquired the morphine habit. Tumor adherent everywhere except a small surface between umbilicus and pubes. Contents of cyst purulent. She had bed-sores; was so feeble she could not help herself to the extent of holding a glass while drinking water. Tumor removed, patient died two hours later. (I always felt I was under obligations to Dr. D. N. Kinsman, who gave the anesthetic, for getting her off the operating table alive).

Mrs. J. H., aet. 27. Hæmatosalpinx (probably extra-uterine pregnancy) on right side, pus tube on left with firm intestinal adhesions. Operation performed September 11th, 1888. In this case had no nurse, patient's mother did the nursing. She recovered, is well to-day.

Mrs. J. B., aet. 71. A large ovarian cyst, weighing eighty-four pounds. She had been tapped three times. Adhesions to abdominal walls, intestines and to diaphragm. The operation was performed under peculiarly unfavorable conditions. She recovered, was able to sit up on fourteenth day after operation.

Mrs. McE., aet. 32. Had been operated upon by another surgeon who made an exploratory incision $5\frac{1}{2}$ inches in length, and because of formidable adhesions closed the wound, feeling that it was impossible to complete the operation. When I saw her the wound was well healed and the abdominal wall firmly adherent to anterior surface of a large fibroid and there was also a large cystic mass to the left extending up to the ribs. I operated March 27, 1897. The old incision, opened at the upper part, revealed the fibroid firmly adherent to the abdominal wall and with intestines adhered to superior and posterior surfaces. The adhesions were separated and hysterectomy performed.

Then I found a large suppurating ovarian cyst with intestines firmly adherent to upper, inner and posterior surfaces, with omentum adherent in front. The adhesions were all separated and the tumor removed. She made a most excellent recovery. At no time did her temperature reach one hundred.

Mrs. E. O., aet. 32. Operated upon August 18th, 1896. A case of double pyosalpinx complicated with albuminuria.

She had been a pelvic sufferer for several years. The right ovary was cystic, the tube contained pus, and both were bound down in dense adhesions. The left ovary and tube were enlarged and adherent to loops of intestines, making a very difficult dissection. Her recovery was complete.

Mrs. S., aet. 32. Had been a paralytic for two years. A parovarian cyst on right side with an ovarian cyst on the left. A double ovariectomy was performed on July 2d, 1896. She recovered from the operation without incident, and about eighteen months later recovery from the paralysis was complete.

Miss. L. S., aet. 30. Large multiple fibroid weighing seventeen and one-half pounds. One large lobe of the tumor was intra-ligamentary and required enucleation. Supra vaginal hysterectomy was performed January 2d, 1893. Recovery complete and temperature normal after fifty-one hours.

Mrs. E. J., aet. 32. A case of extra uterine pregnancy, with peritonitis. The operation was performed November 17, 1897. A large quantity of blood in peritoneal cavity. A pregnancy in the left tube.

Right ovary and tube adherent to intestine and vermiform appendix; the pregnancy, both tubes, and ovaries removed. The abdomen thoroughly washed out and drained. The patient made a most excellent recovery.

Mrs. S. B., aet. 32. Had been bleeding for six weeks. A destitute woman, Operation performed November 27th, 1897. A fibroid of uterus with double pus tubes densely adherent made a very difficult hysterectomy. She recovered without having a temperature above ninety-nine at any time after forty-two hours.

Mrs. E. B., aet. 26. Had been suffering for three years with what was supposed to be gastralgia. Operation performed Feb. 8th. 1897.

The common bile duct practically obliterated; seven gall stones were removed from the gall bladder, and an anastomosis with the duodenum made with the Murphy button. Recovery complete. The button passed on the twenty-sixth day.

Mr. C. R., aet. 74. Had been in the war of the rebellion, where he contracted scurvy and left inguinal hernia. The hernia became strangulated on December 9th, 1898. I saw him and operated for the relief of the strangulation on the morning of December 11th. The bowel was very black and it required some time before the circulation would warrant the return of the bowel. The sac was the thickest and most densely adherent I have ever seen, being three-quarters of an inch thick in the thickest

part. His recovery was perfect and he is to-day well and hearty.

These cases are a few, only, of the many which presented very grave conditions. During the past two years I have operated upon a number presenting unusual and most difficult conditions, which I shall in the near future report in detail, in connection with some thoughts emphasizing the value, importance and possibility of diagnosing complete intra-abdominal and pelvic conditions.

Mental Failure from the View Point of the Physiologist.*

By J. F. Peavy, M.D., Asheville, N. C.

The purpose of this paper is not to deal with special types of mental defectiveness, but rather to view the subject in the mass and to bring forward for consideration some general facts or principles relating to mental physiology and mental failure. A broad and comprehensive view of the general factors entering into a case is sometimes of greater value than the expert but perhaps narrow view of the specialist.

The study of mental manifestations as natural phenomena, giving full recognition to the idea of causation, has marked a very important advance over the old mental philosophy which attempted to study mind as something separate or at least separable from the balance of nature. Psychology is mental physiology. Mental activities are as much functions of the organism as are digestion or muscular action, differing only in kind. Morbid manifestations here as elsewhere in the human economy have their origin in failure, disturbance or perversion of physiologic processes.

The life of any organism so far as its sensible expressions go is made up of the reactions of the organism to its environment. These vary in quality and complexity with the species and the individual development. In the lowest forms they differ but little from the simple play of elementary chemical and physical forces. These lowly organisms react in simple and direct ways to incident forces. Their activities are limited to two elementary functions, nutrition and reproduction. Ascending the scale of life, along with increasing complexity of structure we find an increasing complexity in the relations maintained with environment. The reactions which serve to keep the organism in adjustment with

environment become correspondingly complex, indirect and involved.

These reactions are made possible by the development of the nervous system consisting of specialized organs for receiving impressions, afferent nerve tracts which transmit the impressions inward, central masses of nervous tissue which receive these impressions, interpret them and give rise to motor impulses which, propagated along efferent nerve routes, produce actions which adjust the organism to environing conditions.

In the development of the brain, the central organ of adjustment, the human being has immeasurably outstripped all his competitors in the race of organic development.

The human brain confers an immensely enlarged power for apprehending relations, of adjusting conduct, of using means to ends. The later stages of this cerebral development has marked the acquisition of faculties that differ in kind from any possessed by the brute creation, the higher intellectual, esthetic and moral powers.

In the development of individual organisms, as in the development of a species, actions first acquired, most general, longest used, are the most firmly organized, the most stable. They are also the most automatic. The later acquisitions are less firmly organized, less stable, less automatic. Those latest and most highly specialized products of organic development the distinctively human intellectual and moral faculties are the least stable, the least firmly organized, the least automatic.

Sensation is primarily the basis of all conscious experience. The new-born infant has no conscious experience of its own. Its life up to birth has lain, perhaps, wholly below the level of consciousness. It may be said, in a sense, however, to have registered in its organism, the experiences of its ancestry through the ages past. Through the endless adaptations of structure and function to meet the varying conditions of life, these ancestral experiences have become incorporated and organized into potentialities which, through hereditary transmission re-appear in the offspring. Thus, what its progenitors have seen, felt and done furnish the basis not only for those general qualities which belong to an infant as a human unit, but of those special characteristics which distinguish it as an individual. Of the habits of action built up through the interactions of organism and environment, along the line of ancestral descent or ascent, much is embodied in organs and functions whose activities are purely automatic and lie altogether below the level of consciousness. Yet the inheri-

*Read before the Buncombe County Medical Society.

ted "habits of action" which belong to the psychical sphere condition so closely the conscious states of the individual that the ancestral experiences which have established them may almost be said to rise into the field of consciousness. Many of the instinctive performances of animals, although they appear to involve the element of conscious intelligence, are done with perfect accuracy, without previous individual experience. Such are instances of faculties transmitted in such perfection that the acts themselves are said to be organically remembered. As we ascend the scale of being, along with greater modifiability of mind, greater educability, we find diminishing perfection of transmitted faculty with increasing capacity for development. In our infant just born we have a minimum of transmitted faculty, with a maximum capacity for development. Those potential qualities which the experiences and activities of its ancestors have built up and entailed are embraced in the germinal capacity of the organism and form the subconscious basis of the conscious psychical life of the individual. They are latent capacities merely to be developed into faculties only when conscious relationship with the external is established and maintained through the organs of sense.

The organs of sensation may be regarded as inlets for stimuli from the external world of substance and force which build up the internal world of ideas, feelings and volitions. These stimuli produce disturbances of nerve substance, dynamic associations of the nerve elements, adjustments of inner relations to outer relations. Ideas, feelings, volitions are the subjective faces of these physical disturbances of nerve substance. The human mind, in the study of its own processes, cannot pass without solution of logical continuity from the physics of the brain to the facts of consciousness. Mental states and physical changes in the brain belong to wholly dissimilar orders of facts and refuse to be logically linked together. The relation is one of accompaniment merely. The utmost that can be affirmed is that there is correspondence, coincident and sequent, between the subjective states and molecular changes in the brain.

The physical bases of sensations are mechanical agitations of nerve substance. I use the term "mechanical agitations" to include chemical and isomeric changes. Chemical theories are becoming day by day more kinetic. The end organs of sensation are contrivances of nature for transmuting mechanical energy into nerve disturbance. The waves of nerve disturbance, which are the physical co-relatives of visual or audi-

tory impressions, are but transmuted and transmitted light and sound waves. The same forces which, while external, are light and sound, are propagated inward to the sensorium, conditioned, of course, by the molecular structure of the substances through which they pass. Olfactory and gustatory impressions are less clearly mechanical. They have their sources in those finer molecular actions distinguished as chemical. They are, nevertheless, forms of energy, of motion. They are dynamic. Feeling, with its divisions of touch, muscular resistance and temperature sense, is the oldest of the senses. Through it are maintained the most fundamental relations of the organism to its environment. The impressions received through it are clearly mechanical.

Though foreshadowed in the properties of irritability and contractility inherent in protoplasm, distinctly developed nervous systems, with the organized re-actions to stimuli thus made possible, are not found until some advance has been made in the scale of development. The simplest completed nervous system consists of afferent sensory fibres, a central ganglion and efferent motor fibres. This may be considered the unit, by the multiplication and compounding of which, along with the development of co-ordinating fibres and centres, more complex nervous organizations are built up. In the simplest organic re-actions the efferent motor impulse is but the reflex of the efferent sensory incitement. It is simple, direct, immediate. It effects a correspondence of the most elementary kind. The whole of the sensory stimulation is expended in the motor discharge. The more compound re-actions imply the compounding of the units of nervous organization into more complex wholes by the development of co-ordinating fibres and centres. In this way wider correspondences, wider adjustments of inner relations to outer relations are effected.

Every sensory excitation tends primarily to discharge itself in a motor impulse. To execute organized actions which are always more or less complex it is necessary that these impulses be discharged in definite co-ordinated ways. This result is accomplished largely through the inhibitory power of the higher centres over the lower. Through this power of the higher centres to stay action in the lower they are able to suppress actions which are superfluous and dissipate energy or which interfere directly with the proper adjustment of conduct to circumstances.

The physiologic mechanism of inhibition has never, so far as I am aware, received a

satisfactory explanation. It is probably an elementary biologic fact. It appears to be necessary to that progressive specialization characteristic of organic development. Organic motor activities are expressions of energy expended in specific directions. They are organized actions, adjustments of organism to environment. To effect these adjustments, to make conduct conform to circumstances, it is necessary that impulses to actions out of harmony with the situation be suppressed, inhibited. Failing this, nature in her own relentless way suppresses the actor. Inhibition doubtless takes its rise in the deepest sources of life, is ever present and active in the long climb of organic development and remains as part of the organized and automatic mechanism of vital action throughout its subconscious ranges. It is however, in the higher psychical life of the human being, in those affective, intellectual, emotional and volitional states that we regard as distinctively human that it comes conspicuously into action. It is the regulator of the conduct of the individual, the instrument of self control. The affective life of a human being when traced to its ultimate basis is found to rest upon two fundamental functions, nutrition and reproduction, the one necessary to the continued existence of the individual the other to the perpetuation of the species. The appetites, desires, tendencies of the individual are conditioned by his physical organization. They pertain to the vegetative life. Upon this substructure of desire and inclination is raised the higher mechanism of intellectual and volitional activity. The power of attention, spontaneous or voluntary hinges upon interest which is a derivative of desire. Upon the strength of interest felt depend the strength and perfection of the acts of attention and the vividness of the impressions received. Spontaneous attention is the outward flow of the mental energy in the direction of a specific attraction. Voluntary attention differs from it in that there is added an accessory mechanism of inhibition which represses impulses to respond to distracting excitations and confines the mental energy to specific directions.

The vividness of the sensory impressions as well as the vigor of the mental reactions bear not only a general relation to the function of nutrition but a very definite and close relation to the state of nutrition at the time of their occurrence. Nerve energy is but the disengaged molecular force derived from substances which nourish the nerve elements. The degree of tension or tone of the nervous system as a whole as well as the special tensions in specific

directions produced by appropriate excitants are thus directly dependent upon nutrition. The strength of the dynamic associations of the nerve elements which are precedent to all co-ordinated organic reactions and the vigor of the reactions themselves have a like dependence.

As observed before, the feelings, having their sources in the vegetative life, everywhere underlie intellectual and volitional activity. The intellect cannot move unless the affective nature move with it. The will alike is paralyzed without the feelings. The will as moral choice may either *dirigo*-motor or *depresso*-motor. What we know as will in the capacity of moral choice is made up of the *dirigo*-motor and *depresso*-motor effects of the higher feelings over the lower. The organism tends always to act in the direction of the strongest impulse. Where the higher sentiments are imperfectly developed, this direction may be that of self-gratification regardless of consequences or the rights of others. Under other circumstances, prudential considerations, religious feeling, the sense of artistic propriety, the sentiment of justice or the other altruistic feelings step in and repress or modify the action. In such a case, the incitement itself is not abolished. It is an experience which has modified the organism. Instead of being reflected in an act it has flowed on into higher centers and entered as an element into higher and wider dynamic associations and eventually reappears as a potential quantity in actions which are wider adjustments.

Consciousness is an incident of change of mental state. It is dependent upon the shock of transition from one state to another. As regards the succession of states of consciousness, there is a normal is which, to speak roughly, the nerve energy concerned in mental action goes out proportionately in all directions. There is a maintenance of proportion between the mental responses to excitations varying in degree and importance. In this regard, there is considerable normal range for variations in individuals and between individuals as differently influenced by occupation, environment, etc. Passing beyond the normal limit in one direction, there is loss of discrimination along with feebleness in the mental responses to stimuli. The mind tends to react indifferently in all directions. There is diffusion of nervous energy. The power of concentration is lost. There is rapid change of mental state. Under stimulation, internal or external, ideas displace each other with great rapidity, causing a condition of relative polyideism with loss of cohesion between

the ideas themselves. There is no persistence of mental states, no strength of purpose, no capacity for sustained effort.

Passing the normal limit in the opposite direction, we find increased persistence of mental states, concentration of nervous energy, a relative monoideism, progressive contraction of the field of consciousness. Many of the peculiar great men of the world have made name and fame by reason of the persistence and predominance of certain mental states and tendencies almost morbid. This type of mental action developed to an extreme degree gives us, under its chronic form, the condition known as fixed idea in which the nerve tension is very great in one direction, there being indifference to excitations in other directions. Among its acute manifestations we have the hypnotized condition, trance, ecstasy, etc. In these conditions there exists contraction, narrow limitation, of the field of consciousness. There is exaltation of consciousness itself within this narrow range. It is probable that a condition of absolute monoideism cannot be maintained, but terminates in complete unconsciousness.

"Thinking," says Bain, "is refraining from acting or speaking." Another author has said "thought is a reflex act limited to its first two-thirds." Two types of the genus homo may be noticed here, the man who acts immediately and the man who reflects. The former is the ready man. His sensory impressions are acute and tend strongly to be reflected in motor discharges. His actions incline to be automatic. He is in close touch with his environment. His correspondences are prompt, but of limited range. He observes closely but is lacking in power of generalizing. He acquires manual dexterity readily and is graceful of movement. His nervous energy is constantly expending itself outwardly. In the second type, the reflecting man, the afferent impressions instead of tending to be reflected directly in acts, tend rather to establish mental states, mental attitudes or tensions. These mental states tend in turn, through the mechanism of association, to expend themselves in constructing other mental states. The materials used are the *residua*, the dynamic modifications of the nerve elements, left in the track of former states. The man thinks, compares, adjusts. The nervous energy expends itself largely in these internal adjustments, these centrally excited successions of states. The tension along the lines of external communication, both sensory and motor, is relatively weak. He is not in close touch with his environment; his adjustments though wider are less prompt than in the former

type; his environment impresses itself upon him but feebly; he re-acts to his environment with but little force; he tends to grow abstracted, out of relation, out of harmony with his environment. Mental action to maintain its normal balance requires to be constantly checked by appeal to the objective. Mind is no law unto itself, has no stability of itself, but looks to nature for its law, has its foundations laid in the order of nature.

Man is a unit. Underlying and conditioning all, is the physical organization. There can be no perfection of function without perfection of physical organization. Failure of function even in its highest ranges means failure of physical organization. Every discharge of function is the expression of change in the organ or associations of organs through which it is accomplished. Every discharge of function not pertaining to the vegetative life means a disengagement of energy, a lowering of tension. The renewal of tension means a draft upon the vegetative life; mind action is brain action; thoughts, feelings, volitions, mean the discharge of brain energy, molecular energy as nerve force. Here as elsewhere, failure, disturbance, perversion of function mean, in some way, failure, disturbance, perversion of nutrition. These failures, disturbances, perversions of nutrition may arise in various ways. Traumatism may originate them. Infections of various kinds may be the proximate causes of them. Autointoxications and imperfect elimination may be named as causes. Disturbances in the heart, liver, alimentary tract, kidneys or sexual organs may originate them. The habitual over-tension of the nervous energies in certain directions, the restriction to too narrow limits of the mental activities, may lead to over-nutrition of certain parts of the brain and nervous system, and under-nutrition of others and consequent loss of balance of function. Influences coming through the higher psychical feelings, sympathies, tastes, likes and dislikes may act as depressants of the nervous energies and disturbers of nutrition and mental equilibrium. In such cases the functional disturbances are primary, the lowering of the nutrition secondary, following the law that nutrition and structure tend to adapt themselves to functional variations.

Nature is full of cycles. Human life is one of them. Each human life is a minor cycle within this grander cycle. Each human being pursues an orbit largely predetermined by inherited tendencies and potentialities. True there may be marked perturbations of course due to strong in-

fluences by the way, indeed, there may be fatal collisions with environment which abruptly terminate its course. Every human life which has completed its full course presents three general periods; first, the period of development, of expanding faculties, of nutrition in excess of expenditure; second, the period of perfected faculties, of sustained nutrition and sustained power, the prime of life; third, the decline of life, the period of failing nutrition and failing faculties. Senile decline is normal degeneration of structure and function. Nowhere is this physiologic failure more manifest than in the higher mental faculties and moral powers. The senescent gradually lose mental initiative, excursiveness of mind and originality of thought. Their mental activities tend to confine themselves to beaten tracks, to fall back upon habits of action established during their own periods of physiologic vigor or inherited from their ancestors. In the moral sphere this failure is no less conspicuous. True a virtuous life co-operating with a favorable inheritance may have laid broad and deep the foundations of a great character rigidly persistent as to its grand essentials. Nevertheless, there is gradual loss of the finer moral qualities. The moral sensibility becomes progressively dulled, the nicer discriminations of moral quality are lost, the higher altruistic sentiments and sympathies die by degrees. There is progressive shrinkage of the sphere of activities mental and moral. From failing nutrition the tension in the higher nerve centres upon which these higher activities depend is no longer maintained.

Profiting by the suggestions of biology, students of mental and nervous diseases are beginning to see in degeneration the general underlying factor in most forms of mental failure. Degeneration is essentially failure of the vegetative functions of the organism. Nutrition fails to maintain structure and function along lines which constitute fitness to survive. Those latest and least firmly organized acquirements, the finer intellectual and moral qualities are the first to show signs of failure. These are faculties which adapt the individual to the higher environment created by modern culture and social advancement. They are faulties which are maintained only when a high degree of nervous tone or tension is maintained. This tension failing, the finer "habits of action" which accord with the moral and social requirements of the age tend to weaken and break up. The individual tends to revert to lower instincts and habits, to become unfit. Nature eliminates the unfit as surely now as when

survival was a question of physical strength and cunning.

I do not wish to be understood as conceding that all forms of mental disease are due to degeneration. Degeneration consists mainly in a failure of power to resist the more direct, proximate causes of disease. Through failure of the vegetative functions to maintain the nutrition and vital force or resistance of the organism at a sufficiently high level it succumbs the more readily to the bombardment of its environment. Special vulnerability at certain points inherited or acquired may determine the the special type of trouble. On the other hand the character of the attacking agent, the direct proximate cause may decide the type of the disease.

General paresis is not identical with degeneration in that it is a distinct clinical entity, and doubtless has its own direct specific causes. Yet beginning in disturbances of those finer molecular arrangements and changes which it is the ultimate duty of nutrition to support involving the cerebrum as a mass and progressively dissolving all its functions, it serves by analogy to give us a clearer conception of degeneration itself. It illustrates the law that mental dissolution follows the reverse order of mental evolution. The first to break up are the finer esthetic and altruistic feelings with the associated intellectual activities. Co-incidentally there is a loss of the inhibitory influence of the higher sentiments over lower ones. The effect is to dissolve the bonds created by culture and social organization.

The individual loses moral completeness along with mental competency. He cannot adjust himself to the demands of civilized and cultured communities. The self-regarding feelings tend to run into actions unrestrained. From the gradual destruction of the mechanism of co-ordination, the actions become erratic, without harmony and purpose. The different elements of the dissolving organism tend to act independently of association with, or restraint by the others. Reactions which are adjustments of the whole organism to its environment are no longer possible. Finally the dissolution involves processes essential to life and the physical organism succumbs.

How to Resuscitate the New-Born Infant.

By C. W. Canan, M. D., B. S., Ph.D.,
Orkney Springs, Va.

All the organs except the heart are in a

state of rest in an infant born asphyxiated. The heart is the only organ of the body that is performing its function. An infant born dead or asphyxiated will have the temperature of the mother, but if left uncovered in a room heated to 70 deg. F. will lose ten degrees of temperature in fifteen or twenty minutes. Keeping up the normal temperature is the most important step in the whole procedure. An infant swung through the air will lose twelve to fifteen degrees in as many minutes. The amount of heat lost in a given time will depend to a certain degree upon the plumpness of the child. A very poor and badly nourished child will lose heat much more rapidly than one of stout, plump build. When adults are exposed to cold that proves fatal, death takes place long before any such loss of temperature prevails.

The causes of asphyxiation in infants are many; anesthetics administered to the mother, narcotics, pressure on the head by forceps or molding, tonic spasms of the uterus, intracranial blood-pressure, shock from manipulations of the cord, pressure on the cord, distortion of foetal attitude and various other conditions.

In those cases where asphyxia is due to anesthesia or narcosis, voluntary resuscitation will take place if the loss of temperature is prevented for a period of fifteen to thirty minutes. The fall of temperature should be prevented by wrapping the body of the child in hot flannel cloths while the face is left uncovered to the free access of pure air. The same end may be accomplished by immersing the body of the child in a basin of water heated to the normal temperature of the body.

For years we have condemned the Schultze method in resuscitating a still-born infant. It is a good method to make a show before spectators, but chilling to the infant. I have maintained the same opinion of Dew's method. These methods are resuscitating to the operator, but deadly to the action of the foetal heart. In both of these methods the stimulating influence of cold air is secured, but the loss of body temperature is exceedingly rapid, which is so detrimental to the already weak heart action. The value of cold air when compared with that of heat is in the proportion of one of cold to twelve of heat. These methods were introduced with a view that proper lung expansion would invariably resuscitate any case of asphyxia. They may look very plausible when viewed theoretically but when applied practically they rob the child of the most important element—heat. I would recommend the following method of resuscitation, and I believe in so

doing that all who try it will be more than pleased from the results obtained. I claim no originality for this method for I believe it has been used in part by many obstetricians.

Two basins are partially filled with water; one containing cold and the other with water as hot as the hand can comfortably bear. The one containing hot water is placed by the side of the mother (she lying with her back to the operator) so the child can be conveniently handled without making traction on the cord. The operator then takes the child with one hand under neck and back of head, and the other under the posterior surface of knees and thighs. Holding the child thus he immerses it in the hot water, covering the entire body, the head and face remaining above the surface. While it is being thus immersed the operator performs artificial respiration by bringing the head and knees together and then carrying them apart. At intervals of every thirty to sixty seconds (an assistant holding the basin of cold water) the operator lifts the infant and dips it quickly into the cold water, then returning it to the hot bath. I was very much alarmed the first time I attempted to resuscitate an infant by this method, because of the decided cyanosis it produced. Shortly after being placed in the hot bath it turned quite "blue" all over, and I thought it was dead, but soon learned that this condition was due to a temporary paralysis and dilation of the capillaries of the skin. This cyanosed condition will soon pass off and the skin will return to its normal.

In asphyxia of anesthesia, narcosis and cerebral congestion, more time is given by sustaining the body temperature for the restoration of equilibrium in the circulation. In asphyxia of anemia the hot baths prevent the one great danger—that of taking cold—and sustains the flagging heart.

The time required to resuscitate a newborn infant will depend upon the cause of the asphyxia, the temperature of the water and the rapidity of the manipulations of the operator. No special fixed time can be laid down, but in a series of cases of my own the "safety point" was reached in ten minutes with sixty-five per cent.; in fifteen minutes with twenty per cent.; in twenty minutes with ten per cent.; in thirty-five minutes with three per cent., and one hour with two per cent.

The heart action continues in an asphyxiated infant much longer than is generally supposed, and so long as its action is heard rhythmically, resuscitation is possible.

Our method explained above, if performed in the lying-in hospital, could be much

improved upon by using (instead of a basin) a vessel made from tin, zinc, or other light material, twelve inches wide and twenty-six inches long and six or eight inches deep with convenient handles at either end.

We advise the mother to lie with her back to the operator, for several reasons: the child can be handled with more freedom, especially if the cord be short, the mother is less exposed, in fact can be kept covered up completely and she can not see what is being done with the child. All other adjuncts used in resuscitation can be applied while the hot water immersion is kept up practically all the time. Before the asphyxiated child is placed in the bath its throat and mouth should be thoroughly cleaned. Then while the bath is being given alternate compression and expansion of the chest should be achieved with freedom as described in this paper.

Any other means that might prove useful should be placed near at hand, such as would be required to stretch the sphincter ani, or make traction on the tongue and the ubiquitous electric current. We would impress upon the student not to make traction upon the cord or handle it, for we well know that moderate manipulation of it "in utero" causes heart shock and often death. Blood communications between child and placenta should remain unimpeded. The uterus must not be "Credeed" or handled unless hemorrhage is present, for if we compress the fundus we might as well sever the cord. But when the pulsation has ceased in the cord then it should be tied and cut, for by so doing the child can be handled to better advantage and the chance to restore life is greatly increased.

The length of time required to resuscitate an asphyxiated child will depend upon several conditions already named. The operator should never give up as long as there is the faintest heart sound. I always make it a rule to try to resuscitate every new-born babe that I knew was living at the beginning of the second stage of labor, unless that stage was greatly prolonged and the heart action had ceased long before it terminated. There is no doubt in my mind that many still-born children have been laid aside as dead whose hearts were still contracting. This is especially true where mid-women attend mothers in their confinement.

About one year ago while passing a country home I was hailed and asked to come in. On entering I met the husband who told me that his "wife was being confined." When I entered the chamber I met an elderly lady who proved to be the "granny." She said she was waiting for the "afterbirth." I saw at once that the

woman was reasonably smart but had been crying. On asking to see the baby the old lady took me to a little stand-table and uncovered it, saying in a low voice that it was born dead. I then made enquiry as to how long the baby had been born and all said between twenty and thirty minutes. I then carefully examined it, and was sure I heard a very faint heart beat. I hurriedly ordered hot water and began work, and before fifteen minutes had passed I handed them a living baby. I do not think that I have ever done any thing in practice that caused people to express their gratitude as in this case. This couple had been married for nine years without offspring—this being their first. The mother said that she had been so happy all through her pregnancy looking forward to the time when she should be a mother, and when the mid-woman said that the child was dead it nearly broke her heart.

It has always been a mystery to me to know how that infant lived so long without help. There were two or three things that were in its favor, the mid-woman did not cut the cord at once; it was a very stout, well-formed child with plenty of fat, and the woman had wrapped it up well before laying it away. All of these things favored it, by preventing a rapid reduction of the body temperature.

We are aware that some practitioners as soon as they find they have an asphyxiated infant to deal with cut the cord and remove the infant from the bed. Our method requires a convenient vessel to be brought to the bed-side so as to avoid this severing the cord, for we believe that while the pulsations keep up between the placenta and child it has that much better chance to be resuscitated. The foramen ovale may not close while the circulation keeps up in the cord, nor the respiration start up promptly as we may foolishly desire, for while the mother still breathes for her child its circulation is gaining the equilibrium of its equable surroundings.

The Value of Glyco-Thymoline (Kress) in the Local Treatment of Diseased Mucous Membrane.

By George A. Hewitt, M.D., of Philadelphia, Pa.

Glyco-Thymoline (Kress) has been so well known for years, has been so widely and beneficially employed, and fulfills so many important indications, that it is superfluous at this date to enter into any de-

scription of its physical and chemical characteristics. There is one valuable feature of its action, however, which seems not to have been sufficiently emphasized. I refer to its powerful exosmotic action, by which it withdraws serous fluid from congested and inflamed mucous membrane, thus relieving engorgement and œdema. This influence, in addition to its emollient and antiseptic qualities, renders it a peculiarly acceptable and efficacious application to an inflamed mucosa.

Glyco-Thymoline (Kress) for these reasons combats the material causes and removes the results of inflammation. Furthermore, the relief of the distended blood vessels stimulates the absorbents to perform their function in the absorption of exudates and infiltrations. The alkalinity of the fluid, moreover, facilitates the removal of accumulated morbid secretions and crusts. It is by virtue of this union of therapeutic properties that Glyco-Thymoline (Kress) has achieved so much success in the treatment of diseased mucous membranes. These structures are particularly exposed by inflammatory attacks due to atmospheric, mechanical, chemical and bacterial agencies.

My own experience with this preparation extends through a number of years, and relates principally to its service in those affections of the nose and throat which come under the observation and care of the general practitioner. Those cavities are extremely prone, as every one knows, to catarrhal attacks. Starting in one or other of these localities, the pathological process may be very rapidly propagated to the eustachian tube and middle ear; long continued hypertrophic rhinitis, aggravated by repeated exacerbations, is the point of departure of anterior and posterior hypertrophies. Some of the infectious diseases of childhood, notably measles and scarlatina are typically characterized by the involvement of throat and nose in a general disease-process.

As the lymphoid tissue of these parts is extremely susceptible to irritation, we are apt to witness, dependent upon the same factors, attacks of adenoiditis, which may serve as the original step in the development of adenoid vegetations, with all their train of evil consequences. A nasal affection may also extend through the lachrymal canal and invade the organ of vision. The larynx may likewise become involved, and in some instances the disease may attack the deeper portions of the respiratory system. Numerous reflex troubles also spring from nasal maladies. It is, therefore, incumbent upon the practitioner to institute treatment as early as possible in every case, in order

to avoid ulterior and disastrous consequences.

In all cases of recurrent and chronic catarrh of the nose and throat, unaccompanied by extreme pathological alterations, Glyco-Thymoline (Kress) is an admirable application, and in a large number of cases no other local measures are demanded. If hypertrophies or adenoids are present, operative procedures will be required for their radical cure.

In illustration of the class of cases in which Glyco-Thymoline (Kress) will be found of marked benefit the histories of a few cases may be briefly cited.

ACUTE RHINITIS.

Cases of acute rhinitis or coryza, do not ordinarily come under the physician's care. If accompanied by decided chilly sensations, some fever, and general malaise, the patient will sometimes seek medical advice in the fear that he is about to suffer from a more severe disorder. If seen sufficiently early action upon the skin by pediluvia, warm bath, warm drinks and Dover's powder, or an equivalent, will generally abort the attack. Most cases run a neglected course, and may finally be brought under professional observation because the nasal discharge shows no tendency to diminish. In the latter class the use of Glyco-Thymoline (Kress) diluted with four to six times its bulk of water, and passed through the nasal chambers by means of Birmingham's douche, two or three times daily, soon proves effective. This douche is a very simple and inexpensive glass apparatus, the management of which is easily learned by any one.

Free flushing of the cavities in this manner is preferable to the use of a spray, as it cleanses the parts of the inflammatory secretions, and is thus enabled to continue its action directly upon the seat of disease. Some cases of the kind are as follows:

Case 1.—A man, 32 years of age, had taken cold three weeks previously from exposure in rigorous weather. He had suffered ever since from coryza, which annoyed him particularly by its persistency. The use of Glyco-Thymoline (Kress) in the manner above indicated soon afforded him relief and in the course of a week the nasal discharge was completely suppressed.

Case 2.—A woman, 29 years of age, had been troubled with coryza and sore throat for two weeks. Breathing was obstructed and there was considerable mucous discharge from the nose. The nasal cavities were irrigated with a solution of Glyco-Thymoline (Kress) and it was also used as a gargle. These local measures, together with

moderate doses of quinine, were soon successful in effecting a cure.

Case 3.—A man, 25 years of age, had been troubled with coryza for a week, together with tickling in the throat, some pain in swallowing and a cough. The half arches were injected but the tonsils were not swollen nor was there any general pharyngitis. Several full doses of quinine were given and Glyco-Thymoline (Kress) was used to flush the nose and also as a gargle. Speedy recovery ensued.

CHRONIC RHINITIS.

In persons of a weakly constitution, in those who are confined too closely to the house and especially in those of a scrofulous diathesis, there is a strong tendency to catarrhal attacks. Such individuals suffer, during the colder portion of the year particularly, from a succession of attacks. In simple chronic rhinitis, chronic coryza or chronic catarrh, there is a free proliferation of the mucous membrane and turgescence of the erectile tissue. Patients of this class usually require tonics and alteratives, such as iron, quinine, strychnine, the hypophosphites, arsenic, mercuric bichloride or cod-liver oil. Glyco-Thymoline (Kress) acts directly upon the seat of disease. A few illustrative cases are appended.

Case 4.—A boy of 12 years had suffered from repeated attacks of malaria, and, being fond of books, hardly had as much outdoor exercise as a growing child requires. His general health was fair, and, with the exception of the malarial paroxysms, he was rarely ill, but in the winter he scarcely recovered from one nasal catarrh before he was again attacked. He was annoyed by the constant necessity of using the handkerchief, and his respiration was often somewhat obstructed. He was placed upon a combination of iron, quinine and arsenic, with the local use of Glyco-Thymoline (Kress) by means of the Birmingham douche. His strength gradually increased, the liability to take cold was decidedly lessened, and he was encouraged to spend more time playing in the open air. After a summer in the country he returned greatly invigorated and with a normal nose. During the following winter he had but little trouble.

Case 5.—A girl, 11 years of age, was similarly affected. She was well built, well grown and usually quick in her studies. She was fond of girlish play also, but exhibited a marked predisposition to nasal catarrh. On account of delicacy of constitution she was ordered compound syrup of hypophosphites with cod-liver oil. Locally Glyco-Thymoline (Kress) was used in the

manner already described. The nasal catarrh and the tonsillitis, to which she was subject, became much less severe and frequent. For the past year she has been entirely free from trouble, is blooming like a rose and heads her class at school.

HYPERTROPHIC RHINITIS.

If chronic nasal catarrh is neglected, it terminates in hypertrophic rhinitis. The substance of the mucous membrane, or corium, the superimposed epithelium and the submucous tissue, become thickened and stiffened by an organized infiltration, which keeps the erectile tissue constantly dilated and full of blood. This hypertrophy, together with the presence of morbid secretions, causes notable obstruction to respiration; the patient breathes more or less habitually through the mouth; the lips, tongue and buccal cavity are dry; the eustachian tube is often involved; there may be dullness of hearing and attacks of pharyngitis, tonsillitis or laryngitis are apt to occur. If such cases are allowed to progress unchecked, they usually give rise to anterior and posterior hypertrophies, which will require surgical intervention.

Cases of hypertrophic rhinitis without thickening of the septum or turbinates are as follows:

Case 6.—A man, 34 years of age, had suffered for years, especially in cold or damp weather, from difficulty of breathing, accompanied by a thin discharge from the nose. At night he was obliged to sleep with his mouth open. He was prone to attacks of follicular tonsillitis. This man was appreciably benefitted by a course of arsenic internally and the persistent local use of Glyco-Thymoline (Kress). In the course of a few weeks the situation was entirely changed. A sense of obstruction was then seldom present. The discharge had entirely disappeared. He is now almost entirely free from his old symptoms. Whenever there is any threatened recurrence he has immediate recourse to his bottle of Glyco-Thymoline (Kress).

Case 7.—A woman, age 22 years, had suffered for years from an aggravated case of hypertrophic rhinitis. Obstruction was marked and discharge was constant. At night she constantly breathed through her mouth. She was subject to sore throats and attacks of bronchitis. This patient was directed to take hypophosphites, malt and cod-liver oil, as she was of a distinctively strumous diathesis. Withal, however, she was possessed of considerable muscular strength, and aided by the local action of Glyco-Thymoline (Kress), made a very satisfactory recovery.

ACUTE PHARYNGITIS,

Glyco-Thymoline (Kress) is a serviceable remedy in the treatment of the above disorder. It is diluted with several times its volume of water and used as a gargle. Patients often testify to its value in alleviating the pain of the inflamed throat. Among many cases in which it was beneficially employed were the following:

Case 8.—A young man, 19 years of age, had taken cold two days previously, had a chill, pain in the head and limbs, cough and slight expectoration. There were no rales in the chest. The throat was sore, he had pain in swallowing, and the pharynx was the seat of a diffuse redness. General treatment appropriate to his condition was given. The man himself attributed much importance to gargling with Glyco-Thymoline (Kress), which, as he expressed it, "went right to the spot."

Case 9.—A woman, 22 years of age, had suffered two days with sore throat. There was pain in swallowing; she had headache, backache, and pain in the limbs. The pharynx was red and swollen. The chest was clear. The same local treatment was equally beneficial as in the preceding case.

Case 10.—A woman, 55 years of age, after an imprudent exposure, was seized with sore throat, pain in the neck, and difficulty in breathing. She was alternately chilly and feverish. The soft palate and half-arches were vividly red. There was no enlargement of either tonsil. The cervical glands and the left sterno-mastoid muscle were tender to the touch. Internal remedies were administered, but the patient ascribed no little share in the improvement which took place to the use of Glyco-Thymoline (Kress) in the form of a gargle.

Case 11.—A woman, 24 years of age, in consequence of a chill suffered from aching pains and sore throat. The pharyngeal mucous membrane was intensely injected, but the tonsils were unaffected. In this case, likewise, the gargle was regarded as contributing materially to the cure.

CHRONIC PHARYNGITIS.

If, as often occurs, chronic pharyngitis is the result of an old affection of the mucous membrane of the nose, the latter organ must receive the same treatment outlined as proper for chronic rhinitis. The following cases may be referred to as examples:

Case 12.—A young man, aged 24 years, had been annoyed for several years by chronic pharyngitis due to smoking. From time to time during the day, and especially in the morning just after rising, there was hawking, which brought up without difficulty a mass of thick mucus. This was the

chief feature of the case, and was notably aggravated by exposure to cold, damp weather. Abstinence from tobacco was advised, but, although he reduced his former allowance, he seemed unable to abandon the habit. Gargling with the fluid of which we write afforded him perceptible relief, reducing the inflammation and irritability of the mucous membrane and diminishing secretion. In connection with the other methods adopted it was finally successful in effecting a cure.

Case 13.—The same efficacy was displayed in the case of a young man, aged 27 years, who had for a long time been subject to chronic pharyngitis, depending upon nose trouble and accompanied at intervals by occlusion of the eustachian tube. In this case the fluid was used both in the nose and throat.

FOLLICULAR TONSILLITIS.

In this disease so common among young children, Glyco-Thymoline (Kress) may be employed with advantage. Its exosmotic properties are extremely serviceable in reducing the size of the swollen glands. The enlargement is apt to subside slowly even after the active stage of the inflammation has passed. Children who are old enough to gargle may employ the remedy in that manner. In those too young it may be applied upon absorbent cotton. Representative cases are:

Case 14.—A boy, 11 years of age, had suffered for a day from headache and fever with pain in swallowing. Both tonsils were red and swollen, especially the right which was studded with patches of exudation from the crypts.

Case 15.—A girl, aged 15 years, had had a chill twenty-four hours previously, her throat felt sore and it pained her to swallow. The glands of the neck were swollen and there was fever. Both tonsils were considerably enlarged. The crypts were exuding their characteristic discharge.

Case 16.—A young woman, 19 years of age, was attacked by vertigo and lost consciousness. Twelve hours later both tonsils were found greatly swollen, almost meeting in the middle line. The cervical glands were moderately enlarged. The surface of the tonsils was dotted by exudation.

The three immediately preceding cases were all treated in the same way, as far as local measures were concerned. This has been described above and will not here be repeated.

HEMORRHOIDS.

The power of this remedy to relieve tur-

gescence is admirably shown in hemorrhoids, especially of the internal variety. This affection very frequently occasions severe distress. Pain, itching and hemorrhage combine to render the patient miserable. In some instances they become seriously debilitated. In the earlier periods of the malady a practical cure may be obtained by the use of Glyco-Thymoline (Kress) as an injection and compress. The preparation is diluted with an equal quantity of water and of the mixture, from two drachms to half an ounce are thrown into the rectum by means of a small syringe. This operation is performed two or three times a day. In the intervals it is a good plan to insert a wad of absorbent cotton, saturated with the fluid, into the rectum in order to secure a more constant action. The remedy has also been given with success by the mouth in such cases, the dose being a teaspoonful, well diluted. Cases in illustration of this mode of treatment are:

Case 17.—A man, 50 years of age, of robust build, who had always enjoyed good health and muscular vigor, was severely afflicted. The tumors were not large but they gave rise to intense, lancinating pain in the rectum, shooting likewise into the urethra. There were frequent hemorrhages. For a month or more the man had been unable to sleep much and had lost considerable flesh. The use of the remedy as indicated above was followed by a very happy result. The symptoms were rapidly ameliorated and by the end of a month entirely disappeared.

Case 18.—In the similar, though less severe case of a man, 52 years of age, there was pain and occasional bleeding, but the most prominent symptom was distressing pruritus. All the manifestations were fully relieved by the use of Glyco-Thymoline (Kress).

VESICAL, UTERINE AND VAGINAL DISEASES

In cystitis the same preparation produces excellent results, removing from the bladder the accumulation of mucus which, by its continued presence, aggravates the local condition. After the organ has been thus cleansed, the remedy is strikingly efficacious in allaying the inflammation. For irrigation of bladder one part of Glyco-Thymoline (Kress) is added to ten or twelve of water.

In endometritis the cavity of the womb is thoroughly cleansed or curetted, according to circumstances and the indications of the case, after which it is packed with tampons impregnated with one to ten solution of Glyco-Thymoline (Kress). In mod-

erate cases of leucorrhea this fluid alone will suppress the discharge.

In gonorrheal vaginitis this remedy has proved effectual.

By the courtesy of a colleague I am permitted to quote the two following cases which came under his observation:

VAGINITIS.

The first was that of a young unmarried woman who suffered from acute vaginitis. Examination by the microscope showed the presence of the gonococcus. The disease was well advanced when the patient was first seen. The discharge was profuse, acrid and excoriating. She had been treated by different methods without improvement. Douches were ordered of a solution of Glyco-Thymoline (Kress), ten per cent., and tampons saturated with the same preparation full strength; and under this treatment the patient completely recovered in less than ten days. The patient has remained well for four months and there has been no recurrence of the former trouble.

FUNGUS ENDOMETRITIS.

The second case was that of a married woman, 36 years of age, in whom there existed extreme granular degeneration of the endometrium. The cavity was curetted and packed with gauze saturated in Glyco-Thymoline (Kress), full strength. Recovery was rapid and complete. There was no mucus discharge.

Notes on Diabetes.

Herrick (Amer. Jour. Med. Sci., July, 1900) claims that casts in large numbers in diabetes mellitus are diagnostic of diabetic coma. In 3 cases studied the urine obtained as coma approached being allowed to stand for a few hours, a light, hazy, grayish, or slightly yellow sediment was seen at the bottom of the vessel, rising to about 1-6 the height of the urine. The sediment was found to consist almost entirely of short, broad, light-colored, finely granular casts. On recovery the casts had entirely disappeared. The author also stated that the practice of judging whether sugar exists in the urine by its weight has been severely condemned. There have been some cases of diabetes mellitus where the specific gravity has been as low as 1020, 1019, 1018, 1015, and even 1004, and sugar has been found in considerable quantity.—*International Medical Magazine*.

Don't be satisfied with the bird in the hand if there is any possible chance of getting those in the bush.

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ALCOHOL AND INSANITY.

Strong drink is bad for the liver, for the kidney, for the heart, in fact for the whole man but it is especially bad for the nervous system. And this injurious effect of alcohol upon the nervous system affects not only the drinker but his children after him.

The report of the London County Council shows that drink is a more prolific cause of insanity than even hereditary taint.

During 1899, 21,000 lunatics were cared for and of these, 3,500 were made crazy by strong drink.

Alcohol may be food but it is very poor nourishment for nerve cells.

The man who takes a drink to steady his nerves is like the father who would stick his child's head in a tub of water to stop its cries. Effective for the purpose but bad for the thing affected.

MEMBERSHIP IN THE STATE SOCIETY.

As the rule stands at present no one can join the State Medical Society except during a regular meeting at which the applicant must be present.

The Committee on Credentials, whose business it is to pass upon the qualifications of all applicants, is only appointed to serve during the regular session of the Society, which never lasts longer than four days. This is a safe method in theory, but in practice any one is admitted if he has the names of two members in good standing on his application.

It would be better for the Society if one could join at any time and the qualification should be membership in a local society or the endorsement of any two members of the society in good standing.

Every year a number of doctors who would like to join the Society find it impossible to attend the meetings and the notion is gone when the time of the next

meeting comes. A man's presence in person has nothing to do with his qualifications, in fact it rather embarrasses the Committee on Credentials if they should wish to bring in an unfavorable report. Such things could be done better at a distance, and there would be more time for investigation if any was necessary.

It is to be hoped that the Society will consider the matter at its next meeting in Durham and decide to allow a physician to join at any time if he can secure the endorsement of two members in good standing. The State Society should have at least one thousand members, and to do this the method of joining should be convenient and, at the same time, safe.

THE POOR MICROBE.

A recent writer in the Westminster Review takes up his pen in behalf of the persecuted microbe. He states most positively that they are not inherently pathogenic, and we are to suppose that they only become so by the influence of wicked association. He quotes a physician with a string of letters to his name to prove that the various bacilli play a beneficent role in the economy of nature, and that the modern theory of bacteriology is a huge mistake. So beneficial are the presence of these germs in large numbers that their decrease is likely to be followed by disastrous results. And they are the cause of disease only when absent. His main point seems to be the fact that the Klebs-Loeffler bacillus is found in healthy throats and this is clinched by the statement that pathogenic bacteria are powerless to cause disease in a healthy organism. All of these things are true, more or less, but instead of proving what the writer intends they show the very opposite to be the fact. There is nothing more destructive to germs than a healthy surface of the body, their progress is thereby arrested and they are soon killed. In regard to bacteria being the result of disease and not the cause; this is also true in part.

To see the ground under an oak scattered over with acorns we can truly say that they were produced by the oak, but that they in turn determine the life of other oaks is also true. Pathogenic organisms in a healthy part only shows the normal resistance of healthy tissue.

Not every grass seed forms a stalk, otherwise the world would grow up in weeds and so many disease producing germs waste their vitality on a healthy membrane. All the conditions of life and growth do not reside in the seed of flowers or of disease.

Environment, rest, nutrition and other things are vitally important. A man may have a thousand bushels of the best rust proof oats in the world, but if he does not keep in mind certain conditions of the soil and seasons he will never reap a harvest worth the name. If the modern theory of bacteriology is a farce why has puerperal fever become a thing of the past and why is suppuration one of the worst things in surgery? It may be all a farce, but even then it has proved a welcome substitute for tragedy.

SIMPLE METHODS IN PELVIC SURGERY.

There has been some discussion as to the relative value of the different methods of removing the pelvic organs. The vaginal route is claimed to be the best as the drainage is better, the recovery is prompt, there is no visible scar and the patient's consent is more easily gained to the operation. On the other hand the abdominal route is said to be the best because the field of operation is larger and we can see what we are doing and in case the disease is more extensive than we first thought it is possible to manage it without extra trouble.

To the beginner and to the average surgeon, the abdominal route will in all cases prove the safer way.

In experienced hands, the removal of the uterus through the vagina may be very simple but it is best to leave such work to such hands.

Deaver in speaking on this subject before the American Association of Obstetricians and Gynecologists at Louisville, as reported by the Journal of the American Medical Association, said that simplicity is the sine qua non of good surgery. It means safety, surety, confidence, neatness and a great saving of time, which is an essential factor in the success of many operations. The abdominal route is by far the more rational and therefore the best method of operating on the pelvic organs in the majority of cases, and offers several advantages that render it preferable to the vaginal. Radical operations per vaginam are, with few exceptions, the author thinks, to be discounted for several good reasons: 1. The limited area for manipulation. 2. The impossibility of inspection without destruction and removal of the uterus, which should not be removed except for good and sufficient disease of that organ itself. 3. The marked increased liability to hemorrhage, both primary and secondary. 4. Increased danger of injuring ureters, bowel, bladder and large blood-vessels. 5. Danger

of doing incomplete surgery. 6. Inability to repair satisfactorily injuries to bowel or bladder, etc. 7. Inability to deal safely with an inflammatory mass which involves the vermiform appendix.

CHRISTMAS WEEK IN HAVANA.

We can think of no more delightful place to spend a week in the heart of winter than Havana. Since the American occupation the place has been cleaned out and thoroughly renovated and there is safety as well as pleasure in a visit to this now historic place. During Christmas week there will be a notable gathering of medical men from all parts of the western continent to attend the third meeting of the Pan-American Congress. The work done by this Congress in the past is a hopeful augury of its future. Epidemic diseases in particular are studied from the view point of every section of the country and valuable points in regard to their prevention are brought out in the discussion.

The peculiar relation of the United States to the Tropical countries make it a duty as well as a privilege to send a large delegation to this Congress. The countries entitled to representation in this meeting are, the Danish, French, Dutch and English Antilles (West Indies), Cuba, Porto Rico, Argentine Republic, Bolivia, Brazil, Canada, Chili, Columbia, Costa Rica, San Domingo, Ecuador, United States, Guatemala, Hayti, Hawaii, Honduras, Mexico, Nicaragua, Paraguay, Peru, San Salvador, Uruguay and Venezuela.

All persons who expect to attend are requested to send in their names to the Secretary, Dr. Tomas V. Coronado, Prado 105, Habana, Cuba.

Ladies are invited and their names should be sent in at the same time. If you desire to read a paper send in the title along with your list of names. Havana is able to care for a large delegation in first-class style and there is no danger of overcrowding. There will be considerable reduction in travel rates, so that the cost will not be much even from the most distant points.

There will be twenty-two sections including the whole field of medicine and surgery, and the special branches.

The official languages will be English, French, Spanish and Portuguese.

ASTHMA AND ITS TREATMENT.

The cause of asthma remains to be found, that is any one specific cause.

By some it is said to be due to vasomotor paresis, by others to muscular spasm. One

man says it is caused by alimentary intoxication, another affirms that irritation of the nasal mucosa is the most common exciting agent. Gouty diathesis and catarrh of the genito-urinary apparatus are also given as causes.

Perhaps all of these theories are right and asthma has many causes, and each case should be treated as a separate and distinct malady. The physician is usually called to relieve the difficult breathing and the patient considers this the disease, whereas it is only a prominent symptom.

It is very important that we should treat the dyspnea, but we should not be satisfied with that alone. By a careful examination we should endeavor to locate the cause and condition producing the asthmatic attack, and in doing this it is well to keep in mind all the various theories in regard to the disease. We should look into the condition of the nose and throat, the heart, the alimentary canal, and the sexual organs.

The temperament and general habits of the sufferer may influence the treatment. The proper treatment then will vary with the individual case. In regard to the attack itself atropine is highly useful in doses of 1-150 to 1-75 of a grain. A saline cathartic should be given at once. Jackson recommends the following inhaling powder:

R.	Pulv. potass. nitrat.	3iv
	Pulv. stramonii,	gr. 75
	Pulv. lobelia,	gr. 90
	Pulv. belladon,	gr. 45
	Pulv. grindelia,	gr. 90
	Pulv. hydras. canad.	gr. 15

M. Sig. One heaped teaspoonful to be burned in a small closed room or tent and fumes inhaled.

As a routine general treatment, the cause being indefinite and hard to locate, iodide of potassium gives good results. The general health of the patient being closely looked after

POST-PARTUM INSANITY.

There is a peculiar liability to mental disturbances during the lying-in period and the most usual time for their appearance is within the first few weeks after delivery. Insanity of this time is due to sepsis, auto-intoxication or shock and exhaustion. If from sepsis the point of infection may be some portion of the genital tract or even from the mammæ. In autointoxication we have an accumulation of toxic products in the system, the tissue changes are incomplete and the by products of waste material act as irritants to the nervous system. The eliminating organs are at fault, particularly the kidneys, and we have a number of cases

of insanity following eclampsia. The majority of the cases of insanity of this period will be found to be due to these two causes, sepsis or intoxication, but in the others we can find no definite cause. According to Hoppe 65 per cent. recover, the duration being from three to six months.

Berkly states that relapses are common and in these the prognosis is bad, especially in the poorer class. Cases slowly recovering give a better prognosis as to permanency than those in which the symptoms pass away rapidly. Death is usually due to sepsis or exhaustion. Suicidal and homicidal tendencies are usually prominent and the patient must be closely watched, and those who come about her should be warned. Treatment is difficult, as they refuse any by the mouth, even water is spit out as soon as taken. The genital organs should be carefully examined and the uterus washed out with plenty of hot water. Abscesses and tears should be looked for and the appropriate treatment instituted, if found. Nutritious foods should be given by the stomach tube together with tonic treatment. Hyoscine is the best sedative, as morphia checks elimination too much. Chloral and the bromides by enema may be used with advantage.

Where there is considerable loss of blood and shock as causative factors, transfusion of saline solution, together with supportive remedies will be indicated. In intoxication the eliminative treatment is proper, though it should be regulated so as not to exhaust the patient.

Since the introduction of rigid cleanliness in obstetrics the number of cases of this form of insanity has markedly decreased. Before the advent of cleanliness nearly 20 per cent. of all cases of insanity in the female were post-partum, but at present less than 5 per cent. of all cases have any connection with childbirth.

CHRISTIAN SCIENCE IN NORTH CAROLINA.

We have been hoping that our state might be spared the ministrations of the disciples of Mrs. Eddy but we were hoping against hope.

They have made a base hit in the first inning and we hope the people of the state who think will consider how base it is.

According to the Bulletin of the State Board of Health, the New Bern Journal says that the people of New Bern are stirred up over the case of a boy in that city, whose death is attributed to the Christian Science "doctor," or "practitioner." It seems a young boy, Henry Parsons by name, was sick with a slight attack of

malarial fever. A Christian Scientist woman was called in, no medicine was given him, and the boy died. When asked if she had called a doctor, his mother said she had "somebody better than a doctor." After the boy's death an autopsy was held, and the coroner held an inquest. The evidence showed that the boy had been given no food, medicine or water. "God is with you, Henry; you are all right," said the Christian Scientist doctor, just before the boy died. The coroner's jury returned this verdict:

"We, the coroner's jury, impaneled to investigate the cause of the death of Henry Parsons, a child of eleven years of age, find, from the evidence, the following facts:

"The child was suffering from malarial fever, and did not receive medical treatment because he was under the care of Miss Hattie Harrison, a Christian Scientist.

"We find, from the evidence, his death was the result of improper treatment and neglect. We further find, from the evidence, that the child, in all probability would have recovered if he had had proper medical treatment.

(Signed)

"J. W. BRIDDLE, *Foreman*,

"J. J. BAXTER,

"A. E. HIBBARD,

"JOHN DUNN,

"GEORGE GREEN,

"RALPH GRAY.

We do not waste much sympathy upon a grown man, who is supposed to have some common sense, if he comes down to an untimely death under the suggestive therapeutics of a crazy fool but when a young child is made to suffer and allowed to die under the same treatment we feel stirred up. A grown man or woman may be allowed to choose for themselves and if they want a Christian Scientist or even an Osteopath to treat them all well and good but the innocent child is surely entitled to some protection.

We have plenty of good laws but the trouble seems to be in the definition of "practice of medicine" and "physicians." That these Christian Scientists are not doctors and do not practice medicine is self evident but for that very reason they should be severely punished for trifling with human life. The law was framed to keep quack and impostors out of the regular profession, it should be so changed as to keep them from among the people. We feel like advising a law making it a crime misdemeanor for any man to be absolutely devoid of common sense, the penalty being a shotgun or the penitentiary or both at the

discretion of the court. But as this would entail a heavy tax on the state for ammunition, we would suggest the rigid enforcement of a plain law against these fanatics from Boston.

BOOK REVIEWS.

Modern Medicine, by Julius L. Salinger, M.D., Demonstrator of Clinical Medicine, Jefferson Medical College; Chief of the Medical Clinic, Jefferson Medical College Hospital; Attending Physician to the Philadelphia Hospital and Frederick J. Kalteyer, M.D., Assistant Demonstrator of Clinical Medicine, Jefferson Medical College; Hematologist to the Jefferson Medical College Hospital; Pathologist to the Lying-in Charity Hospital, Philadelphia; Assistant Pathologist to the Philadelphia Hospital. Illustrated, 800 pages. Cloth, \$4.00 net; half Morocco \$5.00. Philadelphia and London. W. B. Saunders & Co. 1900.

The study of modern medicine includes a number of specialties such as physical diagnosis, bacteriology, examination of the gastric contents, the urine, blood, feces, etc., and so the real student has been forced to consult a number of books.

The authors of this work have succeeded in combining in one volume the essential features of these branches as applied to clinical medicine and we have a very practical and helpful work on modern medicine.

The contents include symptomatology and semeiology, physical diagnosis, clinical bacteriology, laboratory methods, infectious diseases of the respiratory system, of the digestive tract, of the kidneys, constitutional diseases, diseases of the blood and ductless glands, of the nervous system, of the muscles, intoxications and sunstroke and diseases due to animal parasites.

The article on malaria gives all the latest progress made in this subject, the plates being a complete study in themselves.

The book as a whole deserves a cordial reception at the hands of the profession and will meet with general commendation.

A Text-Book of Pathology, by Alfred Stengel, M.D., Professor of Clinical Medicine in the University of Pennsylvania; Physician to the Philadelphia Hospital; Physician to the Children's Hospital, Philadelphia, etc., with 372 Illustrations, Third Edition, Revised, 874 pages. Cloth, \$5.00; Half Morocco, \$6.00. Philadelphia and London. W. B. Saunders & Co. 1900.

This is a valuable work both for the student of clinical medicine and the general

practitioner. The causes of diseases, the structural changes and the disturbances of function are all important for the proper treatment. The subjects are presented in a very practical form, as a considerable part of the book were first prepared and used as the basis of demonstrations upon clinical pathology for students of medicine.

The work is naturally divided into General and Special Pathology.

Under General Pathology he discusses the etiology of disease, disorders of nutrition and metabolism, disturbances of the circulation, retrogressive processes, inflammation and regeneration, progressive tissue changes, bacteria and bacterial diseases, animal parasites and their diseases.

Under Special Pathology we have diseases of the blood, diseases of the lymphatic tissues, diseases of the circulation, of the respiratory system, of the gastro-intestinal tract, of the ductless glands, of the urinary and reproductive organs, the bowels, joints, voluntary muscles, the brain and its membranes, spinal cord and membranes and the peripheral nervous system.

The book is well illustrated and finished in first-class style.

A Text-Book of the Practice of Medicine, by James M. Anders, M.D., Ph. D., L.L.D., Professor of the Practice of Medicine and of Clinical Medicine in the Medico-Chirurgical College, Philadelphia; Attending Physician to the Medico-Chirurgical and Sanitarian Hospitals, Philadelphia, etc. Illustrated, Fourth Edition, thoroughly revised, 1292 pages. Cloth, \$5.50 net; Sheep or half Morocco, \$6.50. Philadelphia and London. W. B. Saunders & Co., 1900.

Just one year ago the third edition of this work appeared and it has been so quickly exhausted as to render it necessary to get out a new edition without delay.

No very extensive changes have been made from the third edition, but considerable new matter has been added to keep the work thoroughly abreast of the times. Some of the subjects have been written anew, the most important being Sprue, Ileocolitis in Children and Acute Cholecystitis.

In regard to diagnosis and treatment, advantage has been taken of all the modern methods and recent advances of these departments. The differential diagnosis is gone into in detail in all the diseases having more or less similar symptoms. Typhoid and malarial fever are especially worthy of notice and will well repay a careful reading. The illustrations are well chosen and placed in appropriate places throughout the text. A full index is placed at the back of the book so that its value as a ready refer-

ence is greatly enhanced. The publishers have done their part in making a very handsome volume worthy of a place in every library.

Modern Surgery, general and operative, by John Chalmers DaCosta, M.D., Professor of the Principles of Surgery and of Clinical Surgery, Jefferson Medical College, Philadelphia; Surgeon to the Philadelphia Hospital and to St. Joseph's Hospital, Philadelphia, with 493 Illustrations, Third Edition, Revised and Enlarged, 1,118 pages. Cloth, \$5.00, net; Half Morocco, \$6.00. Philadelphia and London. W. B. Saunders & Co. 1900.

It is not often that the writer of a small hand-book is forced to write a complete text-book, on any subject in medicine, simply by the demand of the profession. But such is the case with DaCosta's Surgery, at first it was a well-written hand-book of surgery, now it is an authoritative work covering the whole field of modern surgery. The book is well-written in what may be called "surgical" sentences, to the point at once. There is no unnecessary detail, no beating around the bush, but the language is direct, clear, reasonable.

The book is certainly worthy of the cordial reception it has received at the hands of the profession and in its enlarged and revised form, it becomes the indispensable book on surgery.

DaCosta appears to be surrounded by those influences that affected Gross, Pancoast, Brinton and Keen and which linked their names inseparably to the history of surgery. If he can operate as well as he can tell how, DaCosta will come to be a name in surgery like the one already made in medicine.

We heartily recommend this book to any and all surgeons who want to know what to do and how to do it.

Heart Disease in Childhood and Youth, by Charles M. Chapman, M. D. Durh, M.R.C. P., Lond, Physician to the National Hospital for Diseases of the Heart, Soho Square, W.; Late Physician to the Farringdon Dispensary, E. C., with an introduction by Sir Samuel Wilks, Bart, M.D., F.R.S. Physician Extraordinary to H. M. the Queen; Ex-President of the Royal College of Physicians and consulting physician to Guy's Hospital. Cloth. 100 pages, 2 and 6 pence. London. The Medical Publishing Co. Limited, Clinical Journal Office, 22½ Bartholomew Close, E. C.

The author discusses in a very clear and practical way the causes of heart diseases in children. Chorea he considers an essentially rheumatic disease and while the at-

tack may be slight yet serious damage to the heart may follow. The prognosis receives careful attention and the hygienic management, such as clothing, locality of residence, diet, education, exercise, sports and games, is well brought out, showing its great importance in the proper management of these cases.

A number of illustrative cases are quoted and actual cases are thus brought before the mental vision of the reader in their clinical and practical bearings. A number of illustrations serve to emphasize the important parts of the text and the whole makes a very interesting book of great value.

A Treatise on Fractures and Dislocations. For Practitioners and Students. By Lewis A. Stimson, B.A., M.D., Professor of Surgery in Cornell University Medical College, New York. New (3d) Edition. In one octavo volume of 842 pages, with 336 engravings and 32 full-page plates. Cloth, \$5.00, net; Leather, \$6.00, net. Just ready. Lea Brothers & Co., Philadelphia and New York.

There is hardly any other one thing that will serve better to make or to ruin the reputation of the practitioner than the way in which he manages his fracture cases.

Old patients with deformed limbs haunt his daily walk and keeps fresh in his mind the improperly treated injury of years ago. An authoritative work on this subject is invaluable and worth many times its weight in gold to the man who tries to treat fractures or dislocations. The second edition of this well-known work of Stimson was exhausted in a year and he has the opportunity in this, the third edition, of taking advantage of all the help which progressive science has brought to the hand of the surgeon.

The work is not overburdened with theoretical suppositions, but practical and to the point.

As attending surgeon to the Hudson Street Hospital where the ambulance cases number 3,500 a year and the dispensary cases 30,000, the author has had a wonderful opportunity to use the best methods for the treatment of fractures and dislocations.

All the common injuries he has seen over and over again and many rare conditions have been carefully considered.

About one-half of the book is devoted to fractures and one-half to dislocations, and as a help to the practitioner and surgeon this work stands at the head of the list. The actual conditions of the injured part is clearly shown in many cases by well executed skiagrams. The publishers have performed their work in a style in strict

accord with the intrinsic worth of the volume.

Pathology and Morbid Anatomy. By T. Henry Green, M.D., F.R.C.P., Physician and Special Lecturer on Clinical Medicine at Charing Cross Hospital, etc. New (9th) American from ninth English Edition. Revised and enlarged by H. Montague Murray, M.D., F.R.C.P., Lecturer on Pathology and Morbid Anatomy at Charing Cross Hospital; Revised for America by Walton Martin, Ph.B., M.D., of the College of Physicians and Surgeons. New York City. Handsome octavo volume of 578 pages, with 4 colored plates and 339 engravings. Cloth, \$3.25, net. Lea Brothers & Co., Publishers, Philadelphia and New York.

We all remember Green's Pathology as the text-book of our student days and as the reference work of the days that have followed.

Eight editions have been exhausted and the ninth is now called for. It has been thoroughly revised and enlarged by Dr. Murray, of Charing Cross Hospital, and to make it even more valuable to American readers, it has been carefully edited by Dr. Martin, of Columbia University, complete chapters on Malaria and the Blood have been added together with one on the preparation and staining of tissues for microscopic study. The number of illustrations has been increased by 180 engravings and several colored plates. All the real advance in this department of medicine is stated in its proper place.

As a text or reference book it is to be highly recommended.

The mechanical work is first-class in every way and the reasonable price puts it easily within the reach of all.

Taylor on Genito-Urinary and Venereal Diseases and Syphilis. The Pathology and Treatment of Genito-Urinary and Venereal Diseases and Syphilis. By Robert W. Taylor, A.M., M.D., Clinical Professor of Venereal Diseases in the College of Physicians and Surgeons, New York. New (2d) edition. In one very handsome octavo volume of 720 pages, with 135 engravings and 27 full-page plates in colors and monotone. Cloth, \$5.00, net; leather, \$6.00, net. Lea Brothers & Co., Publishers, Philadelphia and New York.

The author has taken advantage of the demand for a new edition of this standard work and has practically given us a new book on this subject. Dr. Taylor is in a position to give us the most approved and practical treatment of this question and the result is a comprehensive exposition of all the advances in this important specialty

The original illustrations seemed hard to improve upon, but they have been as carefully revised as the text and some twenty full-page colored plates have been added.

As an authoritative work on these diseases this book in its revised form easily holds the first place. The publishers have added no little to the value of the work by the handsome manner in which they have done their work.

A Reference Hand-Book of The Medical Science, embracing the entire range of Scientific and Practical Medicine and Allied Science. By various writers. A new edition completely revised and rewritten. Edited by Albert H. Buck, M.D. New York City. Volume I. Illustrated by numerous Chromolithographs and 498 fine half-tone and wood engravings. New York. William Wood & Co. 1900.

The first edition of the Reference Hand-book was begun in 1884 and completed in 1887. At first it was thought that the work might be kept up to date by the occasional publication of a supplementary volume. This plan after careful consideration was abandoned and the entire work was put in the hands of specialists for complete revision. Consequently this library within itself has been practically rewritten. This volume contains about 800 pages in double columns, in compact but very plain type and the amount of matter is enormous. The titles are arranged alphabetically and as a reference book it is very convenient.

Among the contributors to Volume I are found the names of Cabot, Dana, Dercum, Foster, Kelsey, Musser, Senn, Souchon, Sternberg, Stimson, Thomson, Tiffany, Von Ruck, Warren, Wilson and 109 others, men distinguished and competent in their department.

Each department of the book has its special adviser and in this way all the titles harmonize with the general plan of the work. The subjects are all complete in themselves, so that there is satisfaction in looking up any particular condition. The titles in this volume are from Aachen to Bladon Springs. Two noteworthy subjects, in all the abundance of good reading, are Abdomen and Bacteria. Under the first we have a first class treatise on abdominal surgery and anatomy and the latter tells all worth knowing about germs of various kinds.

The mechanical work is superb, the printing clear and distinct, the illustrations being genuine pictures and the binding first class in every respect. We congratulate the publishers on the successful outcome of their work and the generous support given by the profession.

The American Illustrated Medical Dictionary a new and complete Dictionary of the terms used in Medicine, Surgery, Dentistry, Pharmacy, Chemistry and the kindred branches with their Pronunciation, Derivation, and Definition, including much collateral information of an encyclopedic character, by W. A. Newman Dorland, A.M., M.D. Assistant Obstetrician to the University of Pennsylvania Hospital; Editor of the American Pocket Medical Dictionary; Fellow of American Academy of Medicine; together with new and elaborate tables of arteries, muscles, nerves, veins, etc.; of bacilli, bacteria, diplococci, micrococci, streptococci, ptomaines, and leucotomains, weights and measures; eponymic tables of disease, operations, signs and symptoms, stains, tests, methods of treatment etc., with numerous illustrations and 24 colored plates, 720 double-column pages, full flexible red leather, \$4.50, net; thumb index, \$5.00. Philadelphia and London. W. B. Saunders & Company. 1900.

We have been looking for an up-to-date dictionary and the "New Standard" is certainly worthy of all praise. It contains more than twice the matter in the ordinary dictionary and yet by the use of clear, condensed type and thin paper of the finest quality, it forms an extremely handy volume only one and one-half inches thick. It contains all the terms used in medicine at the present time, including all the newest words. More than one hundred original tables are found in the work, including new tables of stains and staining methods, tests, etc. The illustration and colored plates are very helpful features of the book. It furnishes a maximum amount of matter in a minimum space and at the lowest possible cost. The publishers have excelled themselves in the mechanical work and it is a luxurious volume, pleasing to the eye and delightful to the touch. It is a genuine pleasure to look up a word in this new dictionary and it should be at the right hand of every student and physician in the country.

Studies in the Psychology of Sex. The Evolution of Modesty. The Phenomena of Sexual Periodicity. Auto-Erotism. By Havelock Ellis, 6½x7½ inches. Pages xii-275. Extra cloth, \$2.00, net. Sold only to Physicians and Lawyers. F. A. Davis Company, Publishers, 1914-16 Cherry St., Philadelphia.

The sexual instinct is an interesting and important study, but with many writers it only serves as an excuse to put a number of dirty incidents in print. It is a matter which must be approached in a true scientific spirit or not at all.

This volume contains these studies written in the right spirit and the author tries to make us understand a difficult subject, but at the same time he does not disgust us with the reality of his illustrations. Of this subject most of us know but little, as we get sidetracked at every attempt to study it. We are unable to properly treat many of the diseases occurring at or about the time of puberty, hence we have no scientific data upon which to base a plan.

Those who really wish to know something of this subject should read this book. He considers the evolution of modesty, the Phenomena of Sexual Periodicity, and Auto-Erotism. The relation of hysteria to the sexual emotions is carefully gone into.

In an appendix he touches upon the influence of menstruation on the position of women, sexual periodicity in men and the auto-erotic factor in religion. A number of diagrams complete the volume.

Ballinger & Wipern on the Eye, Ear, Nose and Throat. A Pocket Text-Book of Diseases of the Eye, Ear, Nose and Throat, for Students and Practitioners. By William L. Ballinger, M.D., Assistant Professor of Otology, Rhinology and Laryngology in the College of Physicians and Surgeons, Chicago, etc., and A. G. Wipern, M.D., Professor of Ophthalmology and Otology in the Chicago Eye, Ear, Nose and Throat College. In one handsome 12mo. volume of 525 pages, with 150 engravings and 6 full-page colored plates. Cloth, \$2.00, net; flexible red leather, \$2.50. net. Lea Brothers & Co., Publishers, Philadelphia and New York.

This is one of the popular series of pocket-text books issued by this well-known firm. All the common diseases of the eye, ear, nose and throat are treated with a fullness in keeping with their importance.

The work is especially gotten up for the use of the student and general practitioner and as many of the more common diseases never go beyond the family doctor, he should have an up-to-date idea of their treatment.

It is fully illustrated and issued at a moderate price.

Manual of the Diseases of the Eye for Students and General Practitioners. By Charles H. May, M.D. Chief of Clinic and Instructor in Ophthalmology, Eye Department, College of Physicians and Surgeons, Medical Department Columbia University, New York. Cloth, 406 pages, with 23 Original Illustrations, including 12 colored figures. New York. William Wood & Co. 1900.

The author presents a concise, practical

and systematic manual of the diseases of the eye intended for the student and general practitioner of medicine. The volume is sufficiently comprehensive, up to date, and yet of such limited size that it can, if desired, be carried in the pocket.

The larger works on this subject are perhaps more desirable for specialist, but for the student and general practitioner this book will be found to be invaluable in everyday work.

Saunders's Question Compend—Essentials of Histology, by Louis Leroy, B.S., M.D., Professor of Histology and Pathology in Vanderbilt University, Medical and Dental Departments; City Bacteriologist to Nashville, Tenn.; Bacteriologist to the State of Tennessee, etc. Arranged with Question following each chapter, and 72 illustrations. No. 25 of Saunders's Question-Compend. Cloth, 232 pages; \$1.00, net. Philadelphia. W. B. Saunders & Co. London; 161 Strand, W. C. 1900.

In this volume we find all the essential facts of Histology arranged in a very convenient form.

The subject is made plain and simple to the student and a good reminder for the practitioner. The publishers are to be congratulated on the success of these compends in general and on securing Dr. Leroy as an author in particular.

Electro-Therapeutics and X-Rays. By Charles Sinclair Elliott, M.D., Author of "Lectures on Nervous and Mental Diseases": Professor of Nervous and Mental Diseases and Electro-Therapeutics in the Hahnemann Medical College of the Kansas City University; Consulting Neurologist to the State Insane Asylum, Fulton, Mo.; Member of the American Institute of Homœopathy; Member of the National Society of Electro-Therapeutics. Cloth, 350 pages, \$2.50 net; by mail, \$2.70. Philadelphia, Boerick & Tafel. 1900.

In this volume the author endeavors to give to the student and practitioner a materia medica of electricity, that is the best and latest methods of applying the various currents. Each current is considered first and the general indications for that particular current, then the various diseases to which electricity is applicable are taken up, giving the special current called for, its strength, duration of sitting and frequency of application.

A section on X-Ray work is added in which is clearly stated the method of taking radiographs and making fluoroscopic examinations.

The work is to be commended for a plain and concise explanation of the uses of elec-

tricity in medicine and it will prove a great help in the intelligent use of this agent.

Saunders's Pocket Medical Formulary with an Appendix containing Posological Tables; Formulæ and Doses for Hypodermic Medication; Poisons and their antidotes; Diameters of the Female Pelvis and Fetal Head; Obstetric Table; Diet List for various Diseases; Materials and drugs used in Antiseptic Surgery; Treatment of Asphyxia from Drawing; Surgical Remembrancer; Tables of Incompatibles; Eruptive Fevers; Weights and Measures, etc., by William M. Powell, M.D., author of "Essentials of Diseases of Children": Member of the Philadelphia Pathological Society, etc. Sixth Edition; thoroughly Revised: flexible leather; 300 pages; patent thumb-index, flap and pocket, \$2.00, net. Philadelphia W. B. Saunders & Company. 1900.

We all know Saunders's Formulary and its practical utility has been so well demonstrated by the marvelous sale of the previous editions that it is only necessary to say that the sixth edition is now on sale, thoroughly revised and brought up-to-date. The busy doctor, too, will not find in so little space so much help and assistance in any other work he can procure.

The prescriptions are valuable, as they are from the most eminent men in the profession and in all cases the name of the author follows the prescription.

Tolstoi a Man of Peace. By Alice B. Stockham, M.D. The New Spirit, by H. Havelock Ellis. Cloth, 140 pages; illustrated; \$1.00 prepaid. Chicago. Alice B. Stockham & Co. 1900.

These two books in one are certainly worth reading by all thinking people. The philosophy of the great Russian novelist is almost revolutionary but worthy of careful study.

The woman gives a charming account of her visit to the great man and we see him at work and at play. The man gives us an insight into the social philosophies of Count Tolstoi in plain English.

We have pictures of Tolstoi and his wife and interesting views of his home life. The recent excommunication of the Count by the Greek Church makes the interest in him more keen.

Fruitfulness (Fecondite) by Emile Zola, Translated and edited by Ernest Alfred Vizetelly. Cloth. 487 pages. New York. Doubleday, Page & Co. 1900.

The birth-rate in any country is an interesting study and in France it is vitally important, as it affects the perpetuity of

the nation. All kinds of unmentionable means are taken by the fashionable wives to prevent a large family of children and this state of things calls forth a vigorous protest from the distinguished novelist Zola. He handles the subject with his gloves off and states his views with honest frankness.

The novel is full of interest as a novel and the lesson he wishes to teach is brought home with added force.

The doctor has a share in the plot and the skilful ovariologist is to the front. The book is a very interesting study for the professional man and many of the glaring evils of married life are not confined exclusively to France and the French people. The large families of our own country are getting rare and some people affect an air of pity for the man who has eight or ten children.

A happy home is where there are at least six children, preferably eight. Of course, the mother cannot be a leader in society, but she can train up her little ones to serve God and love their country, the noblest work in this life.

The Life that Really Is by Lyman Abbott. Cloth. 300 pages. \$1.50. New York. Wilbur B. Ketcham, 7 and 9 West 18th St.

In the busy world of work and worry we are liable to get confused as to the real value of things. The things that abide we push aside and hoard that which is temporary. It is those things which appear to the natural eye that we strive hardest for while the hidden and unseen manifestations of genuine life we ignore.

To the average man it seems so much better to lay up treasures in a national bank even if there is a small danger of thieves and moth or rust, than to lay up traveling expenses, at least, for the journey through the unknown country. These talks of Dr. Abbott are conveniently arranged for easy reading and it is worth while to lay aside the things of everyday life occasionally and spend awhile in the study of the life that really is.

Arabia The Cradle of Islam Studies of the Geography, People and Politics of the Peninsula, with an Account of Islam and Mission Work, by Rev. S. M. Zwemer, F.R.G.S. Introduction by Rev. James S. Dennis, D.D. Cloth, fully illustrated, 434 pages, \$2.00. New York, Chicago, Toronto. Fleming H. Revell Company. 1900.

This is a very interesting contribution to our knowledge of these people written by one who is very familiar with all their characteristics.

His study of Islam is from the Mission-

ary standpoint, but it lacks nothing for that reason, as the author is well versed in the languages of history—English, German, French, Dutch and the less accessible Arabic are easily in his reach and he has collected a fund of valuable facts concerning the followers of the Prophet. The volume is embellished by a number of illustrations, plates and maps and is well bound.

LITERARY NOTES.

The "New Lippincott" Magazine for November opens, as usual, with a Complete Novel. The one presented in this month maintains the always high standard. It possesses the charm of uncommon scene and quaint characterization. It is entitled "Madame Noel," and the author is George H. Picard, who is especially liked for his books "A Mission Flower" and "A Matter of Taste." Madame Noel's household in the little town of Assumpsit, in Longfellow's Acadia, is composed of her son, who is a Catholic Priest; her niece, Euphemie, a girl who is a rare combination of constancy and coquetry; and a young man ward who quarrels with his destiny as planned by Madame Noel yet fulfills his real one in a way which is so skilfully sprung on the reader that it finds him unsuspecting. Neighbors of Madame Noel's, an English rector and his interesting son and daughter, enlist sympathy at the start by a glimpse of their past. The rector came to Assumpsit to establish a mission. He had married the only child of the one great man of the region. Their happiness was short lived, as, after the birth of a third child his wife lost her reason, and the news came to the rector that she had thrown herself and her baby into the river. This tragedy was the beginning of a friendship between the priest and the rector which grew with passing years notwithstanding opposing creeds. But the story has chiefly to do with the lives and love of the four young people, and is one of strong human feeling.

The shorter fiction of the November "New Lippincott" is plentiful and varied in theme. "The Beat that Failed" is by Albert Payson Terhune, who, by the way, is a son of "Marion Harland." It is a newspaper story beginning just at the hour of going to press; and the incident related is most exciting and realistic. Stewart Edward White contributes a tale called "The Race," which in his own words is "blood-and-thunder, but true." But it has a tender side to it. Clinton Scollard shows he is an adept in prose as well as

verse by a clever sketch called "The Passing of a Poet," a study in cavalier times.

Rev. Frederic Poole, Missionary to the Chinese Colony in Philadelphia, contributes to the November "New Lippincott" a paper on "China's Greatest Curiosity." This is so clear and anecdotic that it entertains while instructing how to read the characters which look so difficult, yet when explained are easily understood. The characters illustrated, with explanations, are very amusing in their compound meanings.

Stephen Crane's last paper in the series of "Great Battles of the World" is a fit ending to a splendid piece of work. "The Storming of Burkersdorf Heights" is of absorbing interest from the first page to the last—and then one would like to read more about Frederick the Great through Cane's brilliant pen.

"The Footprints of Bryant" is by Dr. Theodore F. Wolfe, the well-known author of "Literary Shrines of American Authors," etc. This is a charming paper about the home and haunts of William Cullen Bryant, and is accompanied by a rare picture of the "Thanatopsis House."

Bliss Carman contributes verses on "Thanksgiving," beside which there are poems by Paul Laurence Dunbar, Jeanie Peet, Clinton Scollard, Dora Reed Goodale, Agnes Lee, and Edmund V. Cooke.

The "Walnuts and Wine" department opens with some bright reminiscences of funny happenings at the Paris Fair, by Miss Caroline Lockhart, who has just returned from Paris. This is followed by storyettes and jokes which are up to the most amusing standard set for this department.

Of the twelve articles which make up the November Forum, the leading two by Charles Dick and Charles A. Towne, namely, "Why the Republicans should be Endorsed," and "Reasons for Democratic Success," will undoubtedly be taken up for first reading on account of the impending election. Mr. Dick presents a very strong case for the Republican Party by contrasting the various achievements of that party during its many tenures of office, and the almost invariable prosperity which has attended Republican administrations, with the change and uncertainty in business conditions which seem to have been the companions of the Democratic Party when in office. Mr. Towne bases his arguments chiefly upon the questions of Money, Trusts, and Imperialism, so familiar to everybody now in campaign speeches. Fittingly

enough, Mr. George E. Roberts, the Director of the United States Mint, follow these two gentlemen with an article, "Can there be a Good Trust?" He analyzes the constitution and effect of Trusts, and shows that it is impossible to prevent the masses from sharing in the advantages brought on by large combinations of capital and the gains of industrial progress. "The Next Pan-American Conference" is the title of an article by Hon. William C. Fox, Chief Clerk of the Bureau of American Republics; and Mr. H. W. Wiley, Chief Chemist of the Bureau of Chemistry, Department of Agriculture, has a most interesting excursus on Bread and Bread-Making at the Paris Exposition, which contains some views upon bread-making which are novel and surprising. Mr. A. Maurice Low discusses the question of mounted infantry; Sir Robert Stout, Chief Justice of New Zealand, compares the constitutions of the United States and the New Australasian Federation; and the Revival and Reaction in Iron is commented on by Mr. Archer Brown. Major Arthur Giffiths describes the English Intelligence Department; Mr. Llewellyn James Davies considers the present Taming of the Dragon, that is, China; Mr. Budgett Meakin writes of Yesterday and To-day in Morocco; and the 500th anniversary of the death of Geoffrey Chaucer calls forth a very appreciative and interesting essay from Mr. Ferris Greenslet.

The great Trans-Siberian Railway, described by Henry Norman in his series on "Russia of To-day," leads the November number of Scribner's Magazine. This railway is the commercial and political key to the Far East and Mr. Norman travelled its entire length so far as completed, to Lake Baikal and beyond. He describes the wonderful industrial possibilities of the country through which he passed and gives an entirely new idea of Siberia. Instead of a desert it promises to be the leading wheat-producing country of the world, and the railway opens up immense mineral possibilities. Mr. Norman says that since the great wall of China the world has seen no one material undertaking of equal magnitude. The cost of this railway will be about \$500,000,000, and its total length 5,436 miles. Illustrated throughout with the author's photographs.

Jesse Lynch Williams, who has written a number of articles on the picturesque aspects of New York, in this number describes the "Cross-streets of New York." These views, which are so little noticed by the pedestrian, are among the most impres-

sive in the city, and Mr. Williams points them out with rare discrimination, and mingles with the New York of to-day a great deal of its romantic past. It is fully illustrated with original sketches and drawings by many of the best illustrators, McCarter, Linson, Shipley, Guerin, Glackens, and others.

In color-printing this number shows some very effective pictures by Frederic Dorr Steele made to illustrate a charming bicycle story called "The Wheel of Time." These illustrations are made in a novel way and the result is something new in color-printing.

In the November Review of Reviews, there are two comprehensive illustrated articles on the campaign methods of the Republican and Democratic national committees, respectively. The former is contributed by a New York newspaper man, who has the *entree* at the Republican headquarters, and the latter by Willis J. Abbot, manager of the Bryan press bureau at Chicago. Each article is illustrated with reproductions of the "literature," cartoons, and posters circulated by the respective committees. On one page appears a *fac-simile* of a folder issued by the Republican committee in twelve languages. These articles show how the business of vote-hunting has been developed into a science. The tactics employed by the great parties in Great Britain, as illustrated in the Parliamentary elections of the past month, are described in the same number by Mr. W. T. Stead.

The Quarterly Review for October—published in London, October 24—will contain an important article on "The Coming Presidential Election," analysing the issues of the campaign and forecasting its result. The article will be reprinted entire in The Living Age (Boston) for November 3—ready November 1. According to the custom of The Quarterly, the article is unsigned, but it is written by Mr. Edward Stanwood, author of "A History of the Presidency."

ABSTRACTS of the One Hundred Leading Articles of the Month.

Appearance of the Blood in Anemias.

G. H. Stover in the Denver Medical Times for October discusses the clinical appearance of the blood in the anemias.

He places chlorosis and pernicious in the class of primary anemias and says that per-

nicious anemia may be distinguished from chlorosis by the very low count of reds, the prominent poikilocytosis and the presence of myelocytes and megaloblasts.

Secondary anemia may be due to hemorrhage, after which, the serum of the blood is replaced first, the corpuscles next, and the hemoglobin last; soon after such an accident there is a leucocytosis of the ordinary type; then the red cells begin to increase, but they reach their full number before the hemoglobin percentage is up to the norm; sometimes a few normoblasts are seen.

Syphilitic Anemia: The anemia of syphilis is a complicated affair; the appearances of the blood depend on the condition of the patient, on the stage and severity of the disease, and on the treatment being given; ordinarily in the early stage of the disease there is a loss of red cells and hemoglobin with a slight increase in leucocytes; as the eruption appears the leucocytes increase yet more, a good share of the increase being due to eosinophiles and lymphocytes; the blood condition in syphilis is not distinctive of the disease, but it is often valuable as an index of the severity of the infection; yet an anemia with leucocytes in which eosinophiles and lymphocytes are increased is rather suspicious of syphilis, if the case be that of an adult. One observer, Justus, who has made a large number of experiments in this line, says that in suspicious cases, in which the secondaries have not appeared, an inunction or an injection of mercury causes a sudden drop in the hemoglobin, which then rises to a point slightly higher than it was previous to the administration of the drug.

Cancer: Here the hemoglobin is diminished considerably, while the count of red cells is not proportionately so low, except in advanced cachexia; the red cells are apt to show numerous small forms; some are nucleated, and the megaloblasts or large nucleated reds are never as numerous as the normoblasts, a condition which is the reverse of that found in pernicious anemia. The leucocytes are generally increased, but the different kinds and locations of cancer vary this feature of the blood appearance.

Asthma.

Walter A. Wells, in the New York Medical Journal for October 20th, concludes an article on the present state of our knowledge concerning the cause, nature and treatment of asthma. He concludes that asthma has so many points of resemblance with migraine, angina pectoris, and epilepsy that

the suspicion may reasonably be entertained that they all have a similar pathology.

Of the theories which have been advanced to explain the pathogenesis of the asthmatic paroxysm, no one of them so well harmonizes all the facts as the vasomotor theory; and this only when we admit that the disturbance is essentially that of arterial contraction, rather than dilatation.

There is always present in asthma a morbid constitutional state, affecting especially the sympathetic nervous system and giving rise to a certain nutritional aberration, whose most salient feature is the increase of uric acid and the urates.

Asthma occurs as a reflex neurosis from diseases of different organs, but especially often from those directly supplied by branches of the vagus nerve. The nasal trouble, which is the most frequent reflex cause, is not necessarily an obstruction, and may be very inconspicuous and difficult to detect.

Nearly all cases of asthma shows evidences of a pronounced psychic element, as in the curious variety of exciting causes of the attack, in the capriciousness of its course and behavior, and its dependence upon emotional states, suggestions, etc.

In the treatment of the paroxysm of asthma, a strict individualization needs to be observed. The best remedies are those which overcome arterial spasm, such as morphine, nitroglycerin, atropine and chloral hydrate.

Treatment in the intervals of the attacks must be directly, in the first place, to the removal of the cause, and secondly, to the institution of the sound hygienic and prophylactic measures in relation to the mind, diet, air, exercise, etc.

Medical treatment is addressed to improving the constitutional state, for which the best remedies are piperazine, iodide of potassium, and other iodides, the alkalies, and general tonic treatment.

Asthma and Hay Fever.

Ernest Kingscote, in the Therapeutic Gazette for October, says that in the treatment of asthma we should look for any vagal or sympathetic irritation as dyspepsia, cough, uterine discharge, albuminuria, headache, etc., and relieve the condition if possible. Breathing exercises, especially those bringing the upper thorax into play are important. Inhalations of pure oxygen gas, peptonate of iron and out-door life completes his treatment, which, he says, will improve 10 per cent. of cases and cure the other 90.

Anthrax Treated by Actual Cautery.

According to the Brooklyn Medical Journal for October, W. F. Campbell described a case of anthrax treated by the actual cautery. The patient was a truck-driver by occupation and was 33 years of age. Just previous to the time he was taken with this difficulty he was handling deer hides.

He says, in unloading the truck one day, one of these hides hit him on the head. On January 15th he noticed a small pimple which was situated just about the malar prominence of the cheek. It rapidly increased in size until January 18th, when he came into the hospital. At that time the pustule had reached the size of a medium-sized strawberry; it was dark red in color, and at the apex a crater-like depression was exuding a small amount of serum. A smear was taken and a culture made, and the laboratory report subsequently confirmed the diagnosis of anthrax. On January 18th, at the suggestion of Dr. Bristow, the writer used the Paquelin cautery and removed the pustule, together with an area of about one inch all around of sound tissue. At the time the pustule was removed the edema was so great that the patient's eyes were almost closed and the tissues about the neck were very edematous. After the cautery was used there was a slight increase in the edema for a couple of days, after which it subsided and the man went on to the recovery which was presented.

The point which Dr. Campbell wished to emphasize in regard to this case is the fact that this is the third time that the Paquelin cautery has been used in Dr. Bristow's service for the removal of malignant pustule, and the fact that in each instance it was successful. This should recommend this method of treatment for consideration.

Acoustic Exercises for Deaf-Mutes.

According to the Journal of Laryngology for October, V. Urbantschitsch emphasizes the importance of acoustic exercises in all cases for developing the sense of hearing. He then treats of methodical acoustic exercises for deaf mutes. He answers several important questions bearing on this subject.

What cases are suitable for acoustic exercises? The exercises are always at first experimental, because the result cannot be foretold in any individual case. Success has been achieved even in deafness due to cerebro-spinal meningitis. The author is quite opposed to Bezold's view that all who cannot hear tuning-forks a^1 to b^2 should be passed over, for even in such cases he has had good results.

How long should the exercise be contin-

ued? The more difficulty there is in arousing perception of sound, the more are special exercises required, whereas these may be limited or omitted whenever ordinary sounds are perceived or the deaf-mute can hear his own voice.

What are the results of acoustic exercises? The result of the exercises will vary with the nature and duration of the daily practice; with the amount of hearing-power already present, and with its capacity for development; with the intellectual condition of the patient, and with his interest in the exercises. In some cases in which hearing-power is apparently absolutely wanting, a trace of hearing may be awakened which is capable of further development. As a general rule acoustic exercises raise the hearing-power, thus a mere trace of hearing becomes a hearing of tones, this again a hearing of vowels, words and sentences. The capacity for development of each individual case cannot, however, be estimated; it varies even in a right and a left ear which at the start were functionally equal.

What is the practical worth of acoustic exercises? These exercises have a favorable influence on speech, on its hardness and its modulation, and also on the possibility of learning a dialect. As his hearing-power improves social intercourse becomes easier for the deaf-mute, and at the same time the difficulty of earning his living diminishes.

Alcoholic Cirrhosis of the Liver.

M. Luzzatto, in the Medical Record for September 29th, reports the cure of a case of hypertrophic alcoholic cirrhosis of the liver. He says that it was a genuine case and was entirely cured with milk, potassium iodide and diuretics.

The cure probably depended upon a regeneration of the damaged cells of the organ.

For the complication that arose, i. e., sero-fibrinous double pleurisy with partial consolidation of the left lobe, only local treatment was used in addition to the regular treatment for cirrhosis, and yet these conditions were entirely cured.

A study of this case, together with the cases reported in the bibliography, will give prominence to three facts:

Alcoholism is by no means the only cause of cirrhosis of the liver.

Alcoholic cirrhosis of the liver is curable; the hypertrophic form more often, but the atrophic form also.

Cirrhosis very often shows symptoms characteristic of an infectious disease.

Abdominal Myomectomy.

According to the St. Louis Medical Review for October 6th, A. Montprofit says that abdominal myomectomy is indicated in women who are still of child-bearing age, and when it is possible to leave, after ablation of all the fibromas, a utero-ovarian apparatus capable of functioning normally. Myomectomy is contraindicated in patients too aged to become pregnant, or even in young patients where it is not possible to leave behind a useful uterus. In these cases the other operations, abdominal hysterectomy in particular, are indicated. The gravity of the operation does not appear greater than that of the other operations for fibromyomata. The great advantage of myomectomy is to leave in place a utero-ovarian apparatus capable of functioning, and permitting normal pregnancy, such as we have observed. It results from these considerations that total hysterectomy ought not to be done in young women, except after establishing the impossibility of preserving the uterus.

Acne Rosacea.

A. Memelsdorf, in the Medical Standard for October, says that in beginning the treatment of this condition, it is of importance that patients whose constitutional condition is at fault should be put upon a proper diet, such as their case seems to require.

Associated conditions, such as endometritis, dysmenorrhea, anemia, chlorosis, and gastro-intestinal disturbances, must be treated as circumstances may require. A specific internal remedy is not known.

Locally, the milder forms of acne rosacea are treated in the same way as acne vulgaris. The seborrhea and desquamation are removed by frequent washing with green soap and water. The comedones and pustules must be opened and their contents removed. To cure the acne vulgaris a 10 per cent. ointment of precipitated sulphur should be applied at bedtime. In the morning the ointment must be carefully washed off, and a soothing application (10 per cent. boric acid) rubbed into the face. Lassar's paste (betanaphthol, gr. 35; precipitated sulphur, dram 3; vaseline and green soap, 1½ dram each) may be spread upon the skin to the thickness of the back of a knife-blade, and left on for fifteen minutes, when a burning sensation will be felt. It is then removed with a soft cloth and the skin powdered with any dusting powder. This paste should be applied on four successive days, during which time the

face must not be washed. The skin finally becomes inflamed and desquamates.

Heitzman recommends Vleminckx's solution (Calcis, ½ oz.; sublimated sulphur, 1 oz.; water, 10 oz. Boil down to 6 ounces and filter). The face is well rubbed with green soap for several days. This is then washed off, and the acne lesions are incised, with the result that the comedones and the purulent contents of the gland have been removed. The patient then uses the solution in the strength of one teaspoonful to ten of water. After a week this dose is increased to one teaspoonful to nine and a half of water; in the third week one teaspoonful to nine of water, and so on, each following week, until the dilution is one teaspoonful of the solution to five of water. If the skin cannot stand the strength used, it may be necessary to increase the dilution or to stop its use entirely for awhile. During the day a 10 per cent. boric acid ointment is smeared on. A 10 per cent. ointment of precipitated iodid or a 5 per cent. protoiodide ointment or Unna's mercury plaster mull sometimes yield marked results. Scarification and massage may also be used. In rhinophyma ablation by the knife is the only remedy. The nose will always assume its normal shape in a comparatively short space of time.

Bromide of Ethyl.

A. Paul Heineck, in the Medical Standard for October, enumerates some of the advantages and disadvantages of bromide of ethyl as an anesthetic. Among the former are:

Simplicity of use, safety of the sitting posture when necessary, great rapidity of anesthesia, prompt recovery, absence of annoying after effects, much preparation is unnecessary.

Some of the disadvantages are:

It is not suited for prolonged operations, contra-indicated in serious cardiac, renal or pulmonary lesions, lack of complete muscular relaxation, easily decomposed by exposure to light or air, requires experienced assistant.

Its use should be limited to short operations, and the patient should be examined before administration. Use only the pure agent and see that the stomach is empty.

Have the patient urinate before starting the anesthesia and place in a recumbent posture. Remove all constriction from the neck and all foreign bodies from the mouth. Leave the eyes uncovered and use an air tight inhaler. The operator must be prepared to operate as soon as narcosis is complete.

The entire dose should be poured into the inhaler at once, two drachms for a child, four to six drachms for an adult.

Every man to his own opinion, as for us give us plain old chloroform against the field, whether the operation is long or short, whether the patient has heart disease or in-growing toenail.

Best Method for Obtaining Urine Direct from the Ureters.

According to the Boston Medical and Surgical Journal for October 4th, F. Tilden Brown states that the attributes of an ideal instrument are: its equal applicability to both sexes; no contamination from the other gland or from extraneous materials; a minimum amount of discomfort to the patient and of harm following its use; a simple technique.

From these standpoints three types of instruments were discussed: Kelly's, Harris's and the ureter cystoscope.

The advantages of Kelly's method are: (1) The instrument is the simplest in construction; (2) the mucous membrane around the orifice of the ureter can be cleansed; (3) it is the only instrument that can be used in some conditions of the bladder. Its disadvantages are: (1) It is essentially limited to the female; (2) the introduction of a flexible catheter is difficult; (3) the urethral tube is large enough to cause a temporary incontinence of urine; (4) displacement of the catheter is liable; (5) more assistants are needed; (6) the knee-chest posture is disagreeable to the patient; (7) general anesthesia is more generally indicated.

The Harris segregator deserves commendation, but is contraindicated in a number of conditions. Its advantages are: (1) It can be used by any one who is expert in using a catheter; (2) small cost; (3) separate urines can be obtained synchronously; (4) it is easily sterilized; (5) there is not the danger of infecting the kidney. Its disadvantages are: (1) The difficulty of introduction, the discomfort to the patient and the danger of after effects; (2) the advantages of cultures made from the urine obtained is practically *nil*; (3) the uncertainty as to its trustworthiness in separating the urines.

The advantages of the ureter cystoscope are: (1) It permits the ascertaining of the condition of the bladder; (2) the operator can satisfy himself that the specimens of urine are from separate kidneys. Its disadvantages are: (1) It is not applicable where the capacity of the bladder is limited or where the fluid is not transparent; (2)

it is relatively expensive; (3) its details require more study and experience.

Dr. Brown concluded that the ureter cystoscope was the safest and best instrument for obtaining separate urines.

Cataract Operations.

F. T. Rogers, in the Journal of the American Medical Association for October 6th, gives a study of one hundred cases of cataract operations.

He concludes that more attention should be paid to the general condition of the patient, and the presence of any systemic disturbance should influence the prognosis.

All operative procedures on the crystal line body should be done under the best possible illumination.

Providing that it is large enough, the exact site of the corneal section does not materially influence the result.

The combined operation is the safest and the easiest for the operator of limited experience.

The most frequent complications, iritis and iridocyclitis, should be combated by the early instillation of atropia, and their existence does not necessarily prevent an ultimate good result.

Dissection of the capsule can be done with comparative safety and materially increases the acuity of vision.

Infection of the wound does not in all cases destroy the sight, and careful and assiduous treatment may save an apparently doomed eye.

Cold Friction.

J. H. Kellogg in Modern Medicine for September describes cold friction applied to part of the body at one time. The operator uses a woolen mit, closely woven resembling hair-cloth.

The patient is undressed, and lies upon a bed or massage couch wrapped in a Turkish sheet. First of all, the head, face, and neck should be wet with cold water. If the hair is not saturated (women often object to this), a napkin wet with cold water should be placed over the face. The vessel containing the cold water is placed at one side, near the head of the couch; the attendant places the mitt upon the right hand, and then uncovers a small portion of the patient's body, preferably the arm, and taking the patient's hand with his own left hand, he dips the mitt into the cold water, then proceeds to rub the arm, rapidly going over the whole surface, redipping the mitt as soon as warmed, and continuing until the skin reddens. A towel is then thrown

about the arm, which is quickly dried and spatted. The other arm is then treated in like manner, then in succession the legs, the chest, the back, the hips, and back of the legs, and lastly the feet. The soles of the feet should be spatted, not rubbed.

By this means it is easy to bathe a fever patient with ice water or water at a temperature of 35 to 45 deg. without the production of shock.

It may be used in a variety of conditions for its tonic effect beginning with water at 75 deg. and gradually reducing. The only contraindication is cutaneous lesions.

Cancer of the Uterus.

Wm. H. Humiston in the Journal of the American Medical Association for September 29th, writes of the importance of early recognition of cancer of the uterus. We should carefully consider the importance of the lymphatic vessels and glands in their capacity of drains of the different portions of the uterus.

We should remember that abdominal section with complete removal of these special groups of lymphatics alone offers in suitable cases the chance against a recurrence of carcinoma, particularly when the cervix is affected.

In his experience the most common form of cancer of the cervix, the adenocarcinoma, is by far the most to be dreaded. His reasons are:

Because of its natural growth in expanding laterally into the parametrium.

Because the lymphatic vessels and glands in the parametrium are so small that they may easily be over-looked, yet may be infected.

Because of the indirect connection to the chain of glands over the iliac vessels.

Corning's Anesthesia During Labor.

S. Marx, in the Medical Record for October 6th, reports 23 cases of labor in which Corning's method of anesthesia was used to prevent pain. In all these cases no symptoms appeared which caused apprehension of either immediate or remote danger. The anesthesia lasts from one to five hours. Some disagreeable symptoms were noted as nausea, vomiting, headache, perspiration, chilly sensations and some temperature. Nitro-glycerine relieved when they were severe. Hydrobromate of hyoscine is also good and seems to counteract all the unpleasant symptoms. He has used $\frac{3}{4}$ of a grain within an hour, but the average was $\frac{1}{4}$ of a grain. Sepsis must be carefully guarded against.

Cancer of the Pelvic Organs

According to Augustus P. Clark in the Va. Medical Semi-Monthly for September 21st, cancer may have its starting point in a lacerated cervix uteri. Its seat of development is usually in the epithelium. Its occurrence not infrequently takes place after the patient has become a multipara, and before she has become of advanced age. The exposure of the mucous membrane to continued or repeated irritation hastens its onset.

Cancer of the uterine corpus has had its origin from endometritis and from its allied conditions; the disease may be induced or intensified by inflammation of the utricular glands of the uterus and by the effects of external pressure. A sarcomatous condition may result from the same cause. Cancer of the broad ligament, as also that of the ureter, has been observed as the result of extension from the uterine cervix. The meatus urinarius has been noticed as an original seat of cancer. In such cases vesical and urethral disturbances have been known to antedate the appearance of the malignant change.

Cancer of the ovary or of other portions of the adnexa may occur as secondary to a primary point of invasion. The route of transmission is usually along the course of neighboring lymphatics or along the epithelial cells or the ducts of such open channels of communication. The fact that cancer cells may so readily invade the epithelium of newly formed growths containing endothelium shows the importance of taking measures for their early removal before degenerative changes have extensively occurred. The morbid development undoubtedly arises at times by abdominal proliferation of the epithelium from its basic point of origin to the deeper structures within. The majority of cases of cancer occurring in the bladder if secondary to involvement of the cervix portion of the uterus.

The cases which call for special consideration are those of the villous type. Curettement and the employment of the galvanocautery afford the best means of relief. In those cases of rectal cancer in which the sphincter ani is not invaded excision of a portion of the rectum and the removal of the coccyx and the lower section of the sacrum can sometimes be advantageously had to recourse to. The use of the Murphy intestinal button in such cases will be of service. The only effectual radical method of treatment worthy of that name is by excision. Partial removal of the uterus for its extensive invasion by malignant disease will not suffice. The fact that uterine or

pelvic fibroids and fibromyomata may take on malignant transformation is coming more and more to be recognized. The necessity of keeping a close watch for changes that may be assumed becomes therefore obvious. Both of the round and the spindle-shaped celled sarcomata may originate in benign fibroids. Total excision of such neoplasms in their earliest stages, when possible, will afford the most satisfactory result.

Cocaine Anesthesia by Lumbar Puncture.

In the Medical News for October 13th, J. Riddle Goffe reports two cases of hysterectomy under spinal anesthesia with cocaine.

The first case was a vaginal hysterectomy in which 30 minims of a two per cent. sterilized solution of cocaine was used. The angiotribe was used as the hemostatic, and the patient felt no pain. She made a good recovery.

The second case was an abdominal hysterectomy and one-third of a grain of cocaine was used. There was sweating, nausea and vomiting as in the first case. The anesthesia was not as complete as in the first case as there was a little pain in the last stage of the operation.

The author says that this is, perhaps, the first abdominal hysterectomy done by this method. The recovery was uneventful.

Enteroliths.

Byron Robinson, in the North American Journal of Diagnosis and Practice for October, reports three cases of enteroliths. He states that he never knew a case of complete obstruction for eight days to recover, so complete obstruction with vomiting demands early operation.

Every foot of the tractus intestinalis should be examined before closing the abdomen.

In weak hearts and vomiting patients the stomach should be inspected before the anesthetic is given.

All of these cases of enterolith were women.

Women being prone to the formation of gallstones, it is probable that the gallstone formed the nucleus around which the enterolith increased by layers.

In two of these cases, time showed that the enterolith traveled through the intestinal tract at the rate of two to five feet in five months.

It is a curious feature that the tractus intestinalis will tolerate a fecal mass twice or three times the size of an enterolith without

special resentment but an enterolith so small that the bowel wall will need to contract on it to obstruct gas and stool will create vomiting and gangrene.

Enteroliths are generally compound of the phosphates of calcium or magnesium or a combination of these salts with various other salts and vegetable matters. Frequently a foreign particle forms the nucleus around which, in a layer like manner the enterolith forms.

His colleague posted a horse which died of enterolith obstruction and found an enterolith the nucleus of which was a three cornered piece of metal which is used to hold the window glass in the frame. The horse had been gnawing at a window and ate one of those pieces of metal.

The enterolith is usually single and round or oval in shape.

The oat stones or avenoliths are composed of the indigestible parts of oatmeal.

Experiences of the South African War.

In the Canadian Practitioner and Review for October, G. Sterling Ryerson writes of some experiences in the war in South Africa.

He says that out of 12,637 wounded men, 936 officers and 11,701 men, only 732 died of wounds, not quite 6 per cent. This he ascribes to the aseptic character of the bullet and the prompt application of first aid dressing as well as to the able and efficient treatment of the medical men. The Mauser bullet is a merciful one, though it has an explosive action at short ranges.

On'y 20 amputations were necessary in 3,000 cases. The shell fire was terrifying, but not very destructive.

The fumes of the lydit shells made the headache, but a few drops of vinegar taken internally relieved the condition. Every Boer was provided with a small bottle of vinegar.

Bad cases of joint injury recovered without amputation under antiseptic treatment with free drainage.

The hospital management was good under the circumstances, but in many cases the field hospitals had to be utilized as stationary ones. Lord Roberts is praised for his attention to the wounded and his willingness to grant any reasonable facility in getting up stores and comforts.

The supplies of medicines and drugs had to come through the ordnance department and this should be changed so that the medical officers could have absolute control.

He says that the orderlies should be recruited more carefully and should receive better pay.

Eye Operations and the Nose.

J. A. Lippincott, in the Journal of the American Medical Association for October 13th, advocates the systematic cleansing of the nasal cavities before operations which involves opening of the eyeball. The cause of infection in these cases is to be found in the nose in the majority of instances. The nose should be carefully examined before each operation, and in every case a spray of potassium permanganate, 1 to 2,000, is thoroughly applied some hours beforehand. In some cases the spraying may be repeated immediately before the operation, and where there is decided evidence of nasal disease, it should be used every day for several days afterwards. By the use of this method, he says that the wounds heal with less than the usual degree of redness and the convalescence was more speedy than in cases where no attention was paid to the nostrils.

Exophthalmic Goitre.

John J. Moren, in the American Practitioner and News for September 15th, recommends belladonna in the treatment of exophthalmic goitre. He reports its good effects in continued small doses in two cases. He says, however, that no one plan is successful in all cases.

In one case iodide of potash had a better effect than anything else. Bromides are best to control the nervousness, hydrotherapy may be used for its stimulating and sedative effect. Salol and paregoric for the diarrhea. As a laxative the phosphate of soda.

Operative treatment he does not think much of, as the mortality from the operation is greater than from the disease.

Fracture of the Anatomical Neck of the Humerus Complicated by Dislocation.

In an article in the Western Medical Review for October, W. Jepson asks what should be our treatment of fractures of the anatomical neck of the humerus complicated by a dislocation of the head? His own answer is that—

In fractures through the anatomic neck, with fragment separated from all blood supply, the proper procedure is to remove the dislocated head of the bone at as early a period as may be justified by circumstances, and that passive motion be undertaken early with a view of securing a neoarthrosis, for if the bone were returned it would not unite and would ultimately have to be removed, and if left in its abnormal position it would in all probability induce

deleterious effects. On the other hand, if the fragment has adequate blood supply (as is possible in a fracture involving the tuberosities or the surgical neck), every effort at reduction should be made by direct manipulation, while the patient is under an anesthetic. If this should fail then McBurney's method may be called into requisition. When it is impossible to bring about reduction of the upper fragment, then it would appear to me that removal of the fragment would lead to results superior to those which would follow in event of its being left in situ.

Formaldehyde as a Milk Preservative.

A. G. Young, in the Medical Age for October 10th, gives the answers to a circular letter, sent to the different State and City Boards of Health, in regard to the use of formaldehyde as a milk preservative.

After a careful study of the reports he concludes that used as a preservative it tends at least, to impair the nutritive value of milk; that its tendency is also to interfere with the digestive processes—in either case it is only a question of dosage, and the limit of safety is difficult to determine; that, though the inhalation of formaldehyde gas is much less dangerous than the breathing of the other gaseous agents much used as disinfectants, the results of tests upon animals and one case of accidental poisoning of a human being indicate that formaldehyde taken into the digestive system may produce dangerous and even fatal results; that it would be unwise and unsafe to encourage or to suffer the use of formaldehyde in the public milk supply, even under any possible restrictive regulations; that in every State, as there are now in many, there should be a law prohibiting with effective penalties the use in milk of any chemical preservative whatsoever.

These, at present, are the only rational and safe conclusions. If new light arises in the future we can take our bearings anew, and correct our course if need be.

General Infection in Urinary Diseases.

Posner and Cohn, in the Interstate Medical Journal for October, gives the results of a series of experiments to determine the frequency of general infection in urinary diseases. The following microorganisms were used, prodigious, staphylococcus, streptococcus, coli communis, anthrax and proteus. Rabbits were used and the anthrax gave positive results in two cases.

Prodigious was negative in all three instances. The colon bacillus led to a

general infection in two cases. This result is a contrast to the work of Albarran. This discrepancy can perhaps be explained by the fact that not more than forty-eight hours elapsed in these cases between the time of injection and autopsy, while in Albarran's three positive cases, six, five and eight days elapsed between the infection and autopsy.

The staphylococcus pyogenes aureus and albus and the streptococcus yielded positive results in five cases. In the one case in which the streptococcus was negative, no growth could be obtained at the site of infection, so that they either made a technical error or else utilized a worthless culture.

The question of value of these experiments to human pathology must be considered. It is known that most cases of pyelitis are treated as local disorders which do not materially interfere with the secretion of urine.

Cases of pyelitis can run on for years without causing any interruption in the urinary cycle; that is to say, the kidney tissue proper is not changed materially until sometime after the pyelitis has begun. It is to be remarked that in these experiments, so long a time elapsed between these events that no question of the kidney being anything but changed in molecular construction could be raised. The fact also seems manifest that the colon sets up a general infection no more quickly than does any other micro-organism which enters the renal pelvis.

Gastric Neurasthenia.

D. J. McCarthy in the International Medical Magazine for September says that gastric neurasthenia is where the patient draws on the gastrointestinal tract for the great majority of his elements of worry.

The treatment of gastric neurasthenia depends on the diagnosis. Chronic gastric catarrh may be differentiated from gastric neurasthenia by the development as a local stomach trouble, the absence of the fatigue symptoms, and the chemical analysis of the stomach contents. The treatment of catarrh of the stomach in a nervous person does not differ from that in an ordinary individual. The condition yields to local treatment. Purely local treatment applied to the gastrointestinal tract never does any good in neurasthenia, and may do harm. The general nutrition of these patients must be elevated before the gastrointestinal symptoms will yield to any treatment. Constipation should be relieved by regular habits, abdominal massage, and ext. cascara fl. gtt. x-xx at night; or, what is usually

better than the cascara by itself, a mixture of equal parts of the fluid extract of cascara and glycerin. The flabby muscles should be hardened by judicious massage and graduated exercise. The hours of sleep should be so regulated that the patient go to bed at a definite time at night and arise at a definite time in the morning, and a nap of two hours in the middle of the day should be insisted on. He should be in bed at least twelve hours of the twenty-four. A cold bath at night acts very well in most cases, and alternate hot and cold douches over the stomach give, usually, pleasing results. A milk diet will be necessary in some cases, in others merely the cutting off of oily and starchy foods. Milk should take the place of tea and coffee in the diet list. Artificial foods will be found of service in some cases, but milk in proper dilution will serve in the worst cases. If the food be properly chosen, digestants will be unnecessary and should not be used when they can be avoided. If the stomach is trained to take care of a varied diet by small additions to the skim-milk diet, little artificial help will be needed. In some cases the following sedative tonic will be found of value:

R Sodii bromid,	gr. v-xv;
Tr. nux. vom,	gtt. x;
Tr. cinchona, Co.,	3i.

Three or four times daily.

Long standing cases, with insomnia and great decrease in body weight, demand the rest treatment of Dr. Weir Mitchell; in many of the milder cases results are more rapidly obtained by this treatment.

Hernia of the Bladder in the Femoral Ring.

In the American Journal of Surgery and Gynecology for October, Lucy Waite reports a case of hernia of the bladder in the femoral ring. The patient was an unmarried female, 39 years of age. She was lifting a heavy tub when she felt something give way in her side. A tumor was found protruding from the left femoral ring, the size of a hen's egg, hard and somewhat nodular, and exquisitely sensitive. No fluctuation, no impulse on coughing, no difference in size on taking the upright position, no constipation and no pain on bowel movement. The urine showed numerous pus cells. No certain diagnosis was made. It was cut down upon and a small piece chipped out when it was found to be the bladder. The opening was closed and the mass reduced. The patient made a normal recovery.

Graves' Disease.

James R. Arneill, in the *Journal of the American Medical Association* for October 6th, says that the use of thyroid extract in Graves' disease, acute and chronic, is condemned by many as irrational.

If one accepts the theory that Graves' disease is the result of an excessive secretion of the thyroid gland, it certainly would be illogical to prescribe thyroid extract. It would be just as sensible to give hydrochloric acid in Reichman's disease and expect an improvement in the symptoms. However, upon the ground that this disease is the result of an absorption of an excessive amount of perverted thyroid secretion it is good treatment to give these patients thyroid extract. By supplying artificially a normal secretion, it is possible for a diseased organ to recuperate and regain its normal function. In diseases of the stomach with subacidity we prescribe hydrochloric acid, and in many cases, the stomach regains its power to secrete a normal gastric juice. In the treatment of the disease we must guard against drawing too favorable conclusions regarding the efficacy of therapeutics. The disease is prone to improve without or in spite of treatment. On the other hand, exacerbations may occur during treatment, and one is led to think that the medication is responsible for the relapse, when it is without blame. It can not be foretold whether thyroid extract will do a patient good or harm, but many patients with the chronic type of the disease have improved under its use, and it seems a justifiable clinical experiment to try this drug in the treatment of Graves' disease.

Gall-Bladder Surgery.

A. Vanderveer, in the *Annals of Gynecology and Pediatrics* for October, in concluding a paper on this subject says that in suppurative of the bladder, with adhesions, a most thorough examination should be made from within by digital exploration and use of probe, for any possible deep seated calculi.

That in prolonged operations upon the common duct or hepatic ducts, where adhesions are present, and it is difficult to close the incision, after removal of the calculus, drainage through the peritoneal pouch, by means of the lumbar stab is advisable.

When the patient is suffering seriously from cholaemia, with marked ecchymotic spots over the body, intense itching, the blood examined, and found in a septic condition, an operation is not to be encouraged.

It is too late in the vast majority of cases for the patient to recover.

General practitioners, as well as the surgeon, should place more earnestly before the patient and friends the dangers of repeated attacks of gall stone irritation resulting in cancer of the ducts, stomach or liver.

Hemophilia.

In the *Medical and Surgical Monitor* for September, John L. Masters reports an aggravated case of hemophilia. He says that the treatment is prophylactic and treating the hemorrhage when it occurs.

Prophylaxis is all-important. It has been found that there is not so much tendency to hemorrhage in a high altitude with slight humidity and even temperature, so such patients should seek such a climate. Every effort should be put forth to prevent accidental injury, and surgical operations should only be performed when it is a case of life or death. Teeth should never be extracted nor circumcision performed. Occupations free from risk to injury should be selected.

Bleeders should not marry. The treatment of hemorrhage in a bleeder should be conducted along usual surgical lines. Pressure is to be used if possible. Styptics are recommended and should be tried. Astringents, as alum, tannin, etc., may prove of service. Ergot is given internally, but is of less service here than in arterial hemorrhage. Gallic acid and some of the lime salts are said to be useful. If the hemorrhage comes from a tooth, dry plaster of paris forced down into the cavity in the jawbone and held firmly until it sets should be of great service. If the hemorrhage comes from a surface that is accessible, a pledget of cotton saturated in the compound tincture of benzoin and held firmly against the wound until it hardens will form a hard, inflexible coating which will hermetically seal the wound and prevent the passage of blood through it. Because the resin in it is not affected by water, it will remain hard and in place until soaked loose with alcohol.

Hernia.

Charles B. Parker, in the *Cleveland Medical Gazette* for October, discusses the cure of hernia by surgical means. He holds that the correct principle in regard to the cord is to disturb its anatomical relation as little as possible, so he does not draw the cord up as in Bassini's operation but it is merely depressed firmly against the pubes. He says the indications in every operation for inguinal hernia are:

1st. Close the sac. This is accomplish-

ed by pulling down the sac and sewing it so that when it retracts it will rest against the abdominal wall. 2d. To close the internal ring by sewing together the transversalis fascia and securing a firm union of the internal oblique and the transversalis muscle to Poupart's ligament. 3d. The displacing the cord on to the pubes and uniting the pillars of the external ring closely over it. 4th. The operation is not to interfere with the functions of the cord or testicle. No veins are removed. No tension is put on the cord and atrophy of the testicle should not occur.

House Drainage in Relation to the Public Sewer.

According to the Sanitarian for October, Alfred Roehling made a report on this subject before the International Congress of Hygiene.

He said that the end and object of the systematic drainage of a house is to endow it with a good system of water supply and discharge for waste water.

The object will be the most certainly attained where the following essential rules are strictly observed: (a) To exclude from the interior of our houses all sewer gas, to avoid pollution of the soil by faecal matter or waste water, to prevent the generation of deleterious gases in the soil and in the air below and around our houses; (b) to discharge as rapidly and completely as possible into the public sewer all faecal matter and waste water produced.

The application of these two essential rules necessitates (a) an intercepting trap; (b) a disconnecting trap for the exclusion of gas; (c) a trap for the interception of solid matters other than those from the water closet; (d) a proper system of ventilation; (e) a flushing tank for each water-closet; (f) pipes that are airtight and watertight; (g) the employment of proper materials for the pipes; (h) proper dimensions and thicknesses for all pipes; (i) sufficient fall to ensure automatic cleansing; (k) junctions with very obtuse angles; (l) proper construction of water-closets, baths and other sanitary appliances; (m) facility of access to all pipes for inspection and testing; (n) sufficient flush for all closets and baths; (o) periodical visitation and cleansing when necessary.

Hysteria and Neurasthenia.

B. C. Loveland, in *Medicine* for October, brings out some special points in the treatment of hysteria and neurasthenia.

He arranges the treatment under five

heads, so far as possible correct errors of physique, institute healthful surroundings and habits, hydrotherapeutics and calisthenics, correct the mental attitude by properly and tactfully applied suggestions, medicines.

Under medicines he places strychnine first, valerian, pil. camphor, hyoscyamus, bromides, valerianate, and aromatic spirits of ammonia, phosphate of soda, may be used as indicated. But medicines alone never cure these cases and careful attention must be given to physical and mental hygiene, as most important factors in the treatment.

Hemorrhage in Ulcer of the Stomach and Duodenum,

Ralph J. Wenner, in the *Cleveland Journal of Medicine* for October, discusses the surgical treatment of hemorrhage occurring in ulcer of the stomach and duodenum.

He reports two cases and says that the severity of the hemorrhage does not indicate the degree of ulceration.

That the time of vomiting bears no constant relation to the location of the ulcer.

That repeated small hemorrhages or recurrence of a second grave hemorrhage demand operation.

That after careful medical treatment extending over a period of two months, without amelioration of symptoms, an operation should be advised.

Hemorrhage after the Menopause.

We usually suspect cancer in this condition and the suspicion is borne out in the majority of cases by the after history.

E. C. Davis in *Obstetrics* for September says that hemorrhage occurring after the menopause may be due to granular endometritis, atheroma of uterine vessels, vasomotor relaxation, polypus, myofibromata and cancer.

It is well then to examine all these cases carefully before giving any decided opinion. In cancer the hemorrhage is usually associated with an offensive discharge of very characteristic odor. If cancer is found he advises complete removal at once.

Home Modification of Milk.

Charles W. Townsend, in the *Boston Medical and Surgical Journal* for October 11th, writes of the modification of milk in the home.

He says that the modification of cows' milk, with a knowledge of the percentages, is preferable to guesswork feeding of infants.

Percentage feeding can be carried out by a milk laboratory or by home modifications.

Milk laboratories are unavailable to many by reason of their absence or on account of the expense.

Laboratory modifications do not, in the experience of the writer, agree with infants as often as home modifications.

Laboratory modifications are necessarily subjected to more handling and transportations than home modifications.

Milk that is fresh, clean, and from cows free from tuberculosis is preferable uncooked, or, in other words, pasteurization and sterilization, although sometimes essential, are to be avoided if possible.

The method of home modification and of calculating percentages should and can be made extremely simple, and such modifications are sufficiently accurate and uniform.

The addition of cereals to the milk in the form of barley or oatmeal water is generally advisable after the seventh month, and is desirable before that age in some cases as an aid to the digestibility of the milk.

Intestinal Operations.

C. S. Hamilton in the Columbus Medical Journal for September reports four cases of operation on the intestine in connection with strangulated hernia. Two of the cases died and two recovered.

He says that successful suture of the intestinal tract depends upon certain conditions.

Free access to the field of operation by incision suitable located and of sufficient length. In dealing with strangulated hernia this implies frequently incision into the parietes beyond the anatomical limits of the hernia itself.

Rigid asepsis and special provision by properly arranged towels and compresses for catching intestinal contents, which necessarily escape to a greater or less extent.

Temporary compression of intestine on either side of the proposed operation by clamps, gauze strips tied around the bowel, or the fingers of the assistant, to prevent the escape of feces.

In the cases of excision for any condition, division of the intestine in a healthy area wide of the disease, so that the tissue changes upon which union depends may progress normally.

Careful cleansing of the cut ends of the bowel and the V shaped excision of the mesentery with the necessary hemostasis. The vascular relation of the mesentery to the bowel is to be borne in mind at this stage.

Union of the mesentery, and of the intestinal by suture alone or by suture associated with some mechanical device.

In end-to-end union the first line of suture includes the mucosa, the operator using according to his individual preference cat gut or fine silk, interrupted or continuous; the second row consists of Lembert sutures penetrating the peritoneal, muscular and tough submucous coats. The adaptation of the mesenteric borders of the intestines demands the greatest care and accuracy, as it is here that leakage occurs if anywhere.

Injuries of the Bladder Occurring in the Cause of Gynecological Operation.

In the New York Lancet for September John Ward Consins says that indications for treatment in wounds of the bladder are both simple and clear. The urine must be prevented from getting into the pelvic tissues and the peritoneal cavity. The rent in the wall of the viscus should be at once sutured and means to keep the organ empty and at rest.

In cases of rupture or wound of the bladder, the success of immediate treatment depends (1) on the complete disinfection of the seat of injury; and (2) upon the accuracy with which the stitched are inserted. To protect the general peritoneal cavity, sterilized sponges, or gauze, should be employed, and the locality of the wound carefully cleansed. The bladder must then be drawn up and a piece of silk passed through its external coats just at one extremity of the wound. The silk thread can then be used as a retractor, and it will greatly assist the operator in exposing the seat of injury. In some cases the Trendelenburg position will prove a great help. As soon as the wound has been well defined, it should be closed by two layers of catgut or silk sutures. Two layers are always more reliable than one, unless the wound is very small. The first row should take up the mucous and submucous tissues, the second should be passed through the serous and muscular walls, and this row should extend a little beyond the extremities of the wound. The surface should now be finally cleansed, then dusted with iodoform, and the ends of the silk retractor cut off.

In some cases a soft, self-retaining catheter can be introduced to secure complete rest of the organ. Other patients, prefer the introduction of an instrument every two or three hours to any other method of keeping the bladder empty. In extensive injuries the organ can be very efficiently drained by making a temporary vesico-

vaginal fistula, and uniting the mucous membrane of the bladder to the mucous membrane of the vagina. As soon as the injured part has healed, the mucous surfaces are separated, and the opening closes without any surgical interference.

Internal Secretion of the Ovary.

According to the Boston Medical and Surgical Journal for October 11th, A. A. Johnstone says that there is no proof that the ovary has any function other than the manufacture of eggs.

It is in no sense a gland. It is incorrect to compare it any way with the thymus, thyroid or other glands. He considers that if the cause of nervous phenomena in a woman was the lack of an internal secretion, the girl prior to puberty or the woman with delayed menstruation would have similar phenomena. He thinks that the results produced by the administration of ovarian extract could be produced equally well by salt and soda, as hysterical patients are very easily influenced. Gouty cases have greatest trouble at the menopause. He thinks there is not an iota of proof that the disorders of the menopause are produced by the absence of an internal secretion, but they are due to faulty oxidation and deficient elimination. As a proof that the ovary has little influence on the development of the woman, he cites a case in which he removed both ovaries for cystic disease in a girl of eleven who, notwithstanding, went on to perfect physical development. He condemns the practice of preserving a part of the tubes and ovaries as simply a postponement of trouble.

Is Copper a Poison.

According to Hospital for September 22d, Heine, in a paper before the British Association, related some investigations which he had made, with the object of ascertaining the effects of copper when swallowed, or when absorbed either by swallowing or in other ways.

With this object the excretions had been examined for a period of several months from a number of healthy persons engaged, some for many years, in dealing with copper, either in smelting works or as workers in its alloys. brass, &c., and from healthy persons unconnected with any kind of copper work who had intentionally swallowed some compound of copper. Copper was found in relative abundance in the excretions of all these persons, yet they enjoyed perfect health, and the conclusion he arrived at was that much that had been said

in regard to the injurious effects of this metal was without foundation in fact. He went on to draw various conclusions as to the justifiability of using copper, with the object of improving the appearance of preserved peas, &c., maintaining that in such cases "the people who eat 'coppered' vegetable do not consume 'copper.' The chemical compound of copper they swallow is not copper at all, and they are not injured." This is an argument that does not appeal to us. The point of interest which he makes is that certain people sufficiently charged with copper to show it in their excretions enjoy perfect health.

Iritis.

J. H. McCassy in the Medical News for October 6th, writes in a very practical way of the treatment of iritis.

He says that atropine is the sheet anchor, the great anodyne, it paralyzes the spincter muscle and puts at rest the mobility of the pupil, breaks up adhesions and puts the pupil back out of the way. Adhesions are not so likely to occur when the pupil is widely dilated. A solution of sulphate of atropine, four grains to the ounce, instilled every hour or two for eight to twelve hours if necessary until the pupil is fully dilated.

Then one drop every four hours will usually be sufficient. If poisonous symptoms appear atropine must be stopped for a few days. A calomel purge followed by a saline acts like a charm in iritis. This, with hot baths, lower the tension of the eyeball.

An inflamed and watery eye with impeded circulation does not present a good surface for absorption, but the application to the eyelids and brow of hot, wet cotton or towels changed every minute will promote circulation, increase absorption of the atropine or other mydriatic, and relieve pain. Smoked glasses screen the eyes from the harsh rays of light and afford more suitable protection than bandaging. If a broken or swollen lens is the cause of the iritis it should be removed; three or four leeches applied to the temple, forehead and side of the nose are very beneficial. The artificial leech may be used, but it has been unsatisfactory in many hands. Morphine, Dover's powder or aconite may be used to combat pain. Both eyes should be allowed to rest. There is no such thing as resting one eye by closing or bandaging it while the other is at work. The too early use of the eyes will cause relapses. For syphilitic iritis, mercury is the remedy. This should be followed by iodide of potassium. The salicylate of sodium and the alkaline car-

bonates are the mainstay in rheumatic iritis.

Paracentesis is indicated when the tension of the eyeball is persistently and notably raised; also in large hypopyon or dotted spots upon the back of the cornea, or, when the inflammation refuses to yield to milder means. In seclusion or occlusion of the pupil an iridectomy should be performed as soon as the disease becomes quiescent.

Implantation of an Artificial Vitreous.

M. L. Foster, in the New York Medical Journal for October 6th, reports three cases in which Mules' operation was done instead of enucleation for suppurative panophthalmitis. This operation consists in the insertion of a glass ball into the globe after the contents have been thoroughly cleaned out.

The great advantage of this operation is that the muscular apparatus of the eye is maintained in nearly its normal position.

In children the arrest of development after enucleation is prevented when the glass ball is used instead. The convalescence is prolonged somewhat in his experience. We should be careful not to use too large a ball and the sclera should be sewed with silk instead of catgut. Suppuration must be carefully guarded against as this is the main cause of failure. He thinks this operation particularly indicated in children for the prevention of deformity from arrest of development of the orbit.

Iron and Anemia.

W. C. Cooper in Merck's Archives for October gives us some medical philosophy in regard to iron and anemia. He does not think much of iron in this condition. If the patient cannot absorb organic iron from the food why should he assimilate the inorganic medicine? Medicine is not food. He holds that iron is not a remedy for this condition, for this the reason that if it were, it would work at the right end of it, despite the fact that it is uniformly directed against the wrong end of it.

It is a philosophical fact that iron could not cure anemia if it were absorbable; it is a physiological fact that it is not absorbable; it is a practical fact that it does not, never did, and never will, cure anemia.

It is an invulnerable fact that the existence of a perfect artificial tissue food would be wholly without excuse, wherefore imperfect tissue foods are worse than useless. Thus, in the end, the iron-anemia hypothesis descends into implacable *irony* and swallows itself.

Ingrowing Toe-Nail.

George G. Van Schaick, in the International Journal of Surgery for October, says that total avulsion for this condition has now become deservedly obsolete.

He recommends three operations, the Cotting, Anger's and the wedge.

The Cotting operation consists practically in a complete removal of the affected edge of the toe, including the fold, a part of the nail and the matrix. A narrow-bladed knife is used to transfix the lateral fold, the point coming out upon the side of the plantar surface of the toe. The edge of the knife is directed upwards, and cuts out a flap extending a quarter of an inch above the proximal edge of the nail. This flap is then seized with forceps, the blade of the knife is directed downwards, still cutting along the edge of the nail, and the entire edge is thus removed. The edge of the nail, including the matrix, is removed by a sweep of the knife along the affected side of the bone. This operation, at first sight, seems so radical as to appear quite brutal, yet it affords the best results when well done, and the large surface left to granulate gives much less trouble than would commonly be thought to be the case. All these operations are done with constriction by a rubber band, at the root of the toe. The bleeding is really slight, and it is seldom that any small arteries have to be tied or twisted. The raw surface is covered with an antiseptic powder, and the toe is dressed with gauze and then with rubber protective. Then a narrow bandage is firmly applied, after which the constricting rubber band is removed. The protective will prevent the blood from coming through the dressing and final bandage, a great advantage from the double standpoint of appearances and antiseptis. The dressing should be changed on the next day. The materials under the protective will be found soaked in semi-dried blood, which is then washed away with peroxide of hydrogen. The dressing with an antiseptic powder is repeated, but no protective is applied unless there should be some evidence of sepsis. Patients can usually walk about in slippers or a shoe that has been cut away at the side, within two or three days.

Leucorrhea.

According to John C. Hirst, in the Therapeutic Gazette for October, leucorrhea has its origin in one of three places, the vagina, the cervix, or the endometrium of the body of the uterus.

For vaginal leucorrhea he uses tonics for the general health, astringent douches of

alum and zinc sulphate and the occasional use of a solution of silver nitrate, 10 to 20 grains to the ounce. The latter is applied by means of a cylindrical speculum, filling it full of the solution and then slowly withdrawing the instrument, thus making sure that the solution reaches every part of the vaginal wall. In gonorrhea he uses in connection douches of bichloride, 1 to 4000.

In the cervical form he uses hot astrigent douches, Churchill's tincture of iodine to the vaginal vault, and boroglyceride tampons with general tonic treatment.

If from the endometrium, curette, silver and tonic treatment.

Lymph Nodes of the Cervical Region.

H. Horace Grant, in the New York Medical Journal for October 20th, writes of the medical and surgical treatment of acute and chronic lymph nodes of the cervical region. He says that the cause of tuberculous adenitis of the cervical region is almost always local, and takes place through the buccal cavity.

The glandular manifestation, when it progresses, and especially when it is followed by suppuration, indicates a damaged and usually useless, often dangerous gland.

The removal of such a gland *in toto* and promptly is neither difficult nor dangerous, and is the treatment indicated.

Nature will probably provide a new and equally perfect protection in the stead of the one that is lost.

Multiple enlarged glands indicate a constitutional tendency which will not be benefited by removal, except when local discomforts and dangers indicate it.

Small groups or single slowly growing glands are subject to the same indication.

Lacerated Wounds.

William E. Lower, in the Bulletin of the Cleveland General Hospital for April, discusses the treatment of lacerated wounds. He advocates a more simple method of treating this class of injuries, as the average lacerated wound suffers from over treatment. His experience covers more than 2500 cases. His method is:

First, that all lacerations are more or less infected and should be treated antiseptically. Second, the best antiseptic is corrosive sublimate. Third, just as little as is absolutely necessary of the lacerated tissue should be cut away. Fourth, the lacerated edges should be approximated by a gauze bandage instead of suturing or by adhesive plaster. Fifth, whenever possible the lacerated parts should be kept at rest.

Lavage in Diseases of the Stomach.

J. M. G. Carter, in the Medical Fortnightly for October 10th, gives the following indications for lavage of the stomach. To remove undigested food and foreign matters; to cleanse the mucous membrane for the action of medicines; to check hemorrhage; to give antiseptic douching; for sedative purposes; for general tonic effect upon the gastric mucous membrane and parieties.

The removal of undigested foods may be necessary in indigestion, functional dyspepsia, dilatation, cancer and pyloric stenosis. In atrophy, chronic gastritis and functional dyspepsia, as in other neuroses washing the tenacious mucus from the membrane gives a surface by which medicines are more readily absorbed.

Perhaps no class of diseases of the stomach is so generally benefitted by lavage as the neuroses.

The use of lavage in children is very satisfactory in some cases of indigestion, chronic gastritis, dilatation of the stomach and poisoning. Frequently the tube (a large catheter) may be passed very successfully through the nose.

Leukemia.

According to the Medical News for October 20, C. Y. White says that leukemia is a form of anemia characterized by the presence of a very large number of white blood-cells and a reduced number of red blood-cells.

All the forms of white cells in the blood are increased in number, but not all of them equally. This gives rise to certain types of leukemia. Two special forms of cells have been described as occurring in leukemia—the neutrophilic myelocytes and eosinophilic myelocytes. The presence of these cells, however, is not pathognomonic of leukemia, for they have been found in other blood disturbances and in certain infectious fevers. The study of the microscopic character of the blood has led to a division of leukemia into two types, *viz.*, the spleno-myelogenous and the lymphatic forms of the disease. Spleno-myelogenous leukemia is really a pernicious anemia with an increase of the white cells and the presence in considerable numbers of the neutrophilic and eosinophilic myelocytes. Lymphatic leukemia presents less degeneration of the red blood-cells and less disturbance of the normal form of the white cells and of the proportion between the different forms of white cells existing in normal blood. In a word there is less disturbance of the blood-making organs. It

is evident that further study of the minute characters of the white blood-cells will enable us to draw more definite conclusions as to the course of cases of leukemia and their ultimate prognosis.

Practically the only remedy that has done good in certain cases of leukemia is arsenic. It should be given in increasing doses as the tolerance of the patient will permit and should be continued for long periods of time, but with interruptions in order to avoid the production of complications that sometimes follow the arsenic treatment. It seems worth while noting that in two cases of leukemia in which abdominal operations were done there was for a time after the operation a reversion to the normal number of leucocytes in the blood.

Movable Kidney.

Edward W. Andrews, in the Journal of the American Medical Association for October 6th, describes a reefing operation for movable kidney. He gives the following technique:

Incision at outer borders of quadratus from twelfth rib to ilium. This is carried through the lumbar fascia and along edge of quadratus to loose fat about kidney.

The muscles are retracted and the fatty capsule split the whole length of the kidney. The two flaps thus formed are pulled outside, and the kidney thus held well up and back. Care should be taken that the lower pouch of this capsule is pulled high up. In cases of great prolapse, the fatty capsule will be found drawn into a long tube, like a stocking. It will surprise one who has not tried it to see how nicely it can be reefed by drawing it out of the skin opening, and how well the kidney obeys every pull we make in the upward and backward direction. It is expected that Gerota's capsule is included. Five or six inches of this fatty sac can sometimes be drawn up. The kidney will now be seen to lie snugly in the lumbar wound, and yet to rise and fall in respiration. Probably it will be an inch or more below its normal place. This is an advantage, because it removes from it the pressure of the liver, and enables us to hold the entire organ and not merely its lower pole.

The broad segments of the fatty capsule, and its enclosing, or Gerota's, fascia already drawn outside are now held by the hands of an assistant or by long forceps, while the opening in the muscular wall is closed by a line of mattress stitches. These transfix the fatty capsule. The real support is obtained, however, not by the stitches, which

would cut out, but by compression between the muscles.

The flaps should now be cut off an inch or two outside the muscle, everted and stitched down, after which the skin can be closed in any simple manner.

He reports a number of cases and concludes that the adipo-cellular capsule and Gerota's capsule are strong enough to hold up a wandering kidney.

Stitches can not hold this tissue, but pressure between flaps may do so.

Nephropexy will often fail in wandering kidney brought about by gastropexy and enteroptosis.

The new method—reefing operation—has been tested from one to thirteen months, and has shown fair results.

The interposed fascia has not caused failure of union in any case.

Nephritis Following Influenza.

Rowland G. Freeman, in the Archives of Pediatrics for October, after a careful study of 12 cases of acute nephritis following influenza, arrives at the following conclusions:

Although albuminuria is fairly frequent with influenza, nephritis is a rare complication.

The nephritis complicating influenza is clinically of the acute hemorrhagic type and morphologically shows toxic lesions.

It apparently attacks children more often than adults.

The kidney disturbance may appear a few days after the acute symptoms of the influenza, or as long as a month later.

The prognosis is good.

Malarial Hematuria.

Alfred Moore in the Memphis Medical Monthly for October reports a case of malarial hematuria with intestinal hemorrhage. The patient recovered but had recurrence of the hematuria within one week and finally got entirely well.

He believes in the use of quinine as a preventative of this condition. He says that if quinine were properly administered in the beginning and the malarial organisms destroyed before they had time to destroy the corpuscles, there would be fewer cases of hematuria. If the malarial organisms are found to be present there is no rational reason why we should not try to destroy them, and there would be no reason for giving quinine if the organisms were absent.

There are physicians in his city (Memphis) who probably prescribe quinine for

at least one hundred patients a month during the summer months, and hematuria is the rarest complication that they meet with in such cases. The majority of cases of hematuria that we see are generally the cases of chills that are self-treated, and we are only sent for when they are getting no better or the urine is bloody.

If we can convince ourselves that quinine does not produce the complication, and we know positively that it is one drug that will destroy the malarial organisms, then why should we condemn the drug in hematuria, which is the product of malaria?

Nocturnal Enuresis.

According to Fitzjames Malony, in the New York Lancet for August, most cases of nocturnal enuresis are caused by the patient sleeping on his back. The condition is usually brought on by eating meals shortly before bedtime, or by some irritation, such as ascarides, which make a person restless at night. The usual history is that the patient eats his last meal shortly before bedtime; the process of digestion is in full swing when he falls asleep; he then tosses about in his sleep, and finally turns over on his back. The contents of the bladder then press on the sphincter; the nerve influence which ought to keep the sphincter contracted is diverted by the process of digestion and consequently the urine flows away. The presence of worms is supposed to cause enuresis; but it is more probable that they act by causing that restlessness which ends in a patient sleeping on his back.

He recommends the following treatment:

Let the patient take nothing to eat or drink for four hours before going to bed. Let him empty the bladder at bedtime, and let him be awakened at intervals of three hours by an alarm clock for the same purpose. To ensure that he shall not sleep on his back, apply a blister (not cathartine) to the sacrum, or tie a cotton reel or knotted towel round the waist, so that the reel or knot may press on the spine if he should attempt to turn on his back. It is likely that sleeping on the back conduces to enuresis principally by its effect on the position of the bladder; but it may be that the accompanying pressure on the spine, and especially on the sacral plexus, may cause some disturbance of the nerve supply to the bladder. The usual treatments prescribed for this condition seem somewhat fussy and unnecessary. Some of them cure the enuresis by making the bladder so sensitive that it will not retain urine for any length of time, to the great discomfort of the pa-

tient. The change from enuresis by night to frequent micturition by day is like a change from the proverbial frying-pan to the fire.

Normal Salt Solution in Disease.

John R. Haynes, in the Southern California Practitioner for October, tells us of some of the good effects of normal salt solution in disease. Some physicians add other salines to the normal salt solution, but he believes the plain salt to be best in the proportion of 6 drachms of sterilized salt to one gallon of sterilized water at a temperature of 110 to 120 F. This solution acts as a direct tonic to the sympathetic nerve centers and to the muscles of the blood vessels as well as to the heart itself. It has also a direct germicidal action upon the bacilli in the blood and washes out the toxins and urea from the tissues and the blood. The apparatus is simple; a sterile fountain syringe with a thermometer embedded in its walls, four feet of hose connected securely with a large hypodermic or small aspirating needle. Two to four quarts can be used subcutaneously, but intravenous it should not be more than one pint at the time. The temperature should never be less than 110 F. The great value of this solution has been demonstrated in anemia, cholera, diabetic coma, dysentery, eclampsia, anesthesia shock, gastro-enteritis, hemorrhage, peritonitis, pneumonia, poisoning, sepsis, septicemia, syncope, typhoid fever and uremia.

Nitrogen Gas in Tuberculosis.

Henry P. Loomis, in the Medical Record for September 29th, gives some personal observations on the effect of intrapleural injections of nitrogen gas in tuberculosis.

He reports 18 cases, in eight there was hemorrhage which was stopped at once. Sixteen gained in weight. The average amount of gas used was 107½ cc. He concludes that this method will have a permanent place in the treatment of consumption. No bad effects or unpleasant symptoms followed the injections.

In two cases there was apparent arrest of the disease. Its influence on the weight and hemorrhage was marked in all the cases.

Operations for Hernia.

Clark W. Murphy, in the Southern California Practitioner for October, reports several cases of hernia and then reviews some of the methods of operating for radical cure. In inguinal hernia he prefers the

Bassini method to all others. It is performed as follows:

Cut over the inguinal canal from a point a little beyond the internal ring, to the external ring, then over the pubic bone by the side of the penis to the beginning of the scrotum. Make first incision through the skin and superficial fascia and expose the aponeurotic fibres of external oblique. Do not dissect. Try and make incision through skin and fascia on the same plane. Next split the aponeurosis over the canal, beginning the incision externally, as it is easier to open the canal there and not so likely to injure other structures. Next incise tissues to sac which would be cremaster muscle and infundibuliform or transversalis fascia (the former if oblique, the latter if direct hernia.) These two layers are very thin. Then the sub-peritoneal fat, which may be very thick. Separate the sac from the spermatic cord. The vas deferens always lies behind the other constituents of the cord and is easily told by its very thick wall in comparison to its size. Open the sac. Replace the intestine. If omentum is in sac, cut off redundant portion after first ligating with catgut, transfix neck of sac with catgut, tie, cut away sac. Bring outer edge of conjoined tendon of internal oblique and transversalis and edge of rectus into apposition with Poupart's ligament by a sufficient number of interrupted catgut sutures. In other words, close the crevice nature left and make the posterior wall of the inguinal canal conjoined tendon. Three or four sutures are usually enough. Care must be taken not to squeeze the spermatic cord so much that the blood cannot be returned to general circulation by the spermatic veins. Sew up the slit in the external oblique with catgut. Leave the external ring just large enough to allow the cord to slip through easily. Interrupted silkworm gut sutures are used for the skin. Before any of the sutures, deep or superficial, are tied, hemorrhage should be stopped. Blood clot is a good culture medium for bacteria.

Do not drain after any herniotomy if operation has been clean unless hernia has been strangulated.

Operative Treatment of the Nose and Throat.

C. A. Cramton, in the Vermont Medical Monthly for August, calls attention to the importance of the operative treatment of diseases of the nose and throat.

He says that we should examine every patient for nose and throat lesion, and if

such is found and is producing obstruction or neurosis operate. Use, as far as possible, in hypertrophies the galvano-cautery outfit—it is aseptic, bloodless and effective.

Operate upon all cases of hypertrophied tonsils and adenoids in children, using either a tonsillatome or galvano-cautery snare and Gottenstein's curettes.

Remove all polypi, preferable with galvano-cautery snare. Always clip an elongated uvula—it can do no harm and oftentimes works a miracle.

Always remove benign neoplasms such as papillomata, adenomata and fibromata. Angiomata and osteomata must at times be excepted.

Operative treatment of malignant disease of the nose and throat, carcinomata and sarcomata, must depend largely upon the size and location of same and condition of patient. Sarcomata are by far the more common and as a rule are not hemorrhagic in character, though they may possess angiomatous features which would render operative procedures dangerous.

In hay fever and asthma always examine the nose and throat. If any enlargements are found, remove them; any rhinitis, treat it.

Urge upon the young and old the importance of caring for the nose and throat. He hopes the day will come when everyone will consult their physician in regard to the condition of these parts of the body as they now consult the dentist, and that they will take the same care of these delicate mucous membranes that they now take of the body and teeth. When that time comes there will be far less call for operative treatment of the nose and throat.

Organo-Therapy in Gynecologic Practice.

Harvey P. Jack, in the International Journal of Surgery for October, discusses organo-therapy in gynecologic cases.

He reports several cases and concludes that thyroid extract is one of our most reliable vaso-constrictors, and as far as its gynecological application is concerned, should be limited to hemorrhages, and those especially in which the epithelial elements of the endometrium are concerned.

Mammary extract controls the hemorrhages from fibromas, reduces the size of the tumors, and in some cases, causes their disappearance, and should be preferred to thyroid extract, which does the same thing, in treating fibromas.

Parotid extract is the best remedy yet brought out in the treatment of dysmenorrhea, relieving as it does the aches and pains of ovaritis and improving nutrition. Pel-

vic exudates soften and are often absorbed. Menstruation becomes regular and less in amount when excessive and shorter in duration. The headaches and nervousness so often accompanying these cases are, as a rule, cured, health and spirits revive, and, indeed, its action here can be denominated nothing less than specific.

Ovarian extract is indicated in all cases of menopausal nervous symptoms, or when for any reason it is desirable to increase the flow from the uterus. It is now known almost beyond doubt that the ovary has, besides its function of ovulation, another almost as important, that of internal secretion, and that, like the thyroid, it secretes an active oxidizing agent, spermin, that aids in the metabolism of the blood. Marked decrease in the elimination of phosphates has been observed after ovariectomy.

Passenger Coach Sanitation.

J. N. Harty, in the Railway Surgeon for October 16th, makes a plea for better sanitation of the ordinary passenger coach and Pullman.

He says that the passenger coach must be better ventilated and must be kept cleaner. The method proposed here to obtain better ventilation is in accord with the well-known principle of ventilation and is practicable.

American ingenuity has already given us thermostats which regulate the heat of the car satisfactorily. Plainness of interior with abolition of angles and ledges are essential for cleanliness. So, also, does cleanliness demand the abolition of carpets and hangings. And how this may be done without sacrificing elegance, luxury and beauty has been pointed out. In advocating these sanitary features to railroad men, objection has only been raised to constructing earth closets. This seems to be an innovation which cannot be at the present time accepted. Still, it will not do to continue to distribute filth from cars. As all know, this is avoided in Europe by abolishing car closets entirely. As to having skeleton seat frames with removable bottoms and backs which may be sterilized at terminals, God speed the day which brings it.

Peri-Urethral Gravel.

William E. Huger, in the Maryland Medical Journal for October, reports a case of encysted peri-urethral gravel in a man of 70. External urethrotomy was done under 1 per cent. encaine. There was only a moderate amount of peri-urethral induration, and the tissues looked healthy about three-quarters of an inch anterior to the

bulbo-membranous junction. The lumen for a very short distance in front of and behind this junction would only admit an instrument about the caliber of a No. 12 F. On dividing this no stone was found, but below and to the right, bulging into the lumen of the urethra, was an oval mass about 2½ cm. long by 2 cm. thick. This proved to be a collection of encysted phosphatic gravel the size of a buckshot and surrounded by dense fibrous tissue, causing considerable encroachment on the urethral lumen. No connection with the urethra could be found. Here was undoubtedly a mass of encysted extra-urethral gravel, which, by bulging into the urethral, had aided in detaining a small calculus on its way from the bladder to the meatus.

Nitrate of Potassium in Snake-bite.

F. Howard, in the St. Louis Medical Era for September, reports four cases showing the good effect of saltpetre as an antidote to the venom of the rattlesnake. The dose is a heaping teaspoonful for a child of five to ten years; a heaping tablespoonful for an adult with intermediate doses for intermediate ages.

The saltpetre should always be pulverized to assure some accuracy of measurement and readiness of solution. The dose should be well diluted by dissolving in a glassful of water. If patient cannot retain medicines by the stomach double the dose and give per rectum. If necessary stimulate with alcohol or ammonia by mouth or sulphuric ether or strychnine hypodermically.

Plague.

According to William Watt, in the Occidental Medical Times for October, the treatment of plague consists of the free use of stimulants and Yersin's serum.

He says that the great value of this agent both for curative and protective purposes has been well demonstrated. The mortality having fallen from 90 to 40 per cent. under its use, the prophylactic influence of the serum is of very short duration, not lasting for more than 3 or 4 weeks. This is to be expected, because an attack of the plague does not produce permanent immunity from future attacks. The preventive inoculations should consist of 10cc injected subcutaneously and repeated every ten days during the period of exposure; the curative treatment should consist of an intravenous injection of 20cc followed by a subcutaneous injection of 40cc twenty-four hours later. Hafkine's lymph is prepared by destroying the bacilli in a plague culture by means of

heat, and injecting this into the person who desires to obtain protection. It produces a mild attack of plague which gives protection for at least six months, and the immunity is increased by a second injection ten days after the first. It is very evident that this can be used only for prophylactic purposes, and that if administered to one already suffering from plague, or in whom the disease was incubating, it would seriously aggravate the conditions. The dose for an adult is 5cc, but that made in and supplied from the laboratory of the United States Marine Hospital Service should only be administered in doses of 1cc. Therefore Yersin serum should be used for curative purposes, or for the protection of people who have been already exposed to the disease and may be incubating it. Hafkine lymph may be used for protective purposes only, and the administration restricted to those who have not been recently exposed to the disease, and who are not liable to be exposed until they shall have completely recovered from the primary effects of the inoculation.

Placenta Previa.

R. W. Buckman, in the *Journal of Medicine and Science* for October, says that placenta previa is one of the most dreaded complications of labor. He does not recommend any single method of treatment, applicable in all cases and at all times.

A hemorrhage rarely proves fatal before the end of the seventh month. Therefore if the bleeding occurs before this time and is not great and uterine contractions are absent, rest in bed may be all that is advisable. If the bleeding is considerable a well applied vaginal tampon will check it. After the seventh month if the os is dilated or dilatable immediate delivery by version, under strict antiseptic precautions with ether anesthesia, is the safest course. If the os is not dilated and the cervix rigid, the vaginal tampon will hasten dilatation and inaugurate or increase the force of the labor pains. Or while waiting for dilatation we may employ Barnes' method of partial digital separation of the placenta, which consists in passing the hand into the vagina and with one or two fingers make a sweep around the os separating the placenta from the uterine wall. This is often followed by retraction of the cervix and temporary hemorrhage.

When delivery is performed by version the whole hand is passed into the vagina, two fingers are insinuated between the placenta and the uterine wall searching for the placental margin. If this cannot be readily

found do not delay too long. (as the hemorrhage is apt to be alarming) but plunge the fingers through the placenta and with the other hand assisting externally, perform bipolar version, pulling down successively the foot, thigh and breech. The hemorrhage ceases as soon as the child's breech becomes impacted in the os. Plenty of time can now be allowed for the rest of the labor.

Version can be performed when the os is dilated to the size of a silver half dollar, but if the obstetrician distrusts his ability to perform it as quickly as it should be done he can use the tampon in conjunction with Barnes' method while waiting for greater dilatation.

Pyosalpinx.

G. S. Whiteside gives a critical review of 30 cases of pyosalpinx, in the *Boston Medical and Surgical Journal* for September 27th.

Four cases were tapped by the vagina and later required abdominal section; in 23 cases both tubes demanded removal; in two cases it was impossible to do more than open the abscess on account of very extensive adhesions, and in four cases one tube only was removed, all by abdominal section. One case showed general peritonitis at the time of operating, but in the majority the pus was well walled off by adhesions. In three-fourths of the cases the tube was ruptured and pus set free during the removal.

The mortality as a whole was 16 per cent. He concludes that the greatest dangers to be apprehended, in streptococcic infection from peritonitis; in all drained cases from fecal fistula; and in tubercular cases from extension of the disease to other organs.

Prevention and Treatment of "Colds."

The prophylaxis of colds is of the first importance, says W. Scheppegrell, in the *Medical News* for October 13th. Overheated rooms should be avoided, especially those heated by steam or hot water. The clothing should not be too heavy or warm and all wraps should be removed on going into a warm room.

The shower bath is one of the most useful methods of preventing coryza. A warm bath followed by a cold one with brisk rubbing should be used regularly. The nasal passages should be kept clean.

As to the treatment he does not think much of quinine, opium, belladonna or aconite, as they are of little value and may be harmful. In some cases lithia is very

useful where there is a uric acid diathesis. A brisk saline purgative is one of the most useful medicines if given within the first 24 hours.

Locally cocaine is injurious and should not be used, but instead we should bathe with a warm one-half per cent. salt solution used through a douche. It should be used gently and with only sufficient pressure to allow it to press through the nostrils.

Pilocarpine in the Treatment of Inebriety

E. P. Hershey, in the Denver Medical Times for October, is very enthusiastic over pilocarpine in the treatment of inebriety. Alcoholics in excess greatly lessen the metabolic action of the tissue cells, deleterious products are deposited and ptomaine poisoning is the result. The bad feeling following or preceding a spree he thinks due to deficient elimination.

He reports six cases, with two more under observation, in which pilocarpine was used with the best result.

From one-eighth to one-tenth of a grain is given three times daily for 30 to 60 days. Under this treatment the desire is controlled and the patient gets well with no further desire for liquor.

Retro-Dislocations of the Uterus.

S. G. West, in the Chicago Clinic for October, writes of the treatment of retro-dislocations.

Three questions are considered, are these conditions curable by palliative means? If operation is indicated can retro-dislocations be cured by plastic vaginal operations? If not curable by plastic operation from below which is more desirable, Alexander's operation, uterine suspension, or shortening the round ligaments per vaginam?

He concludes that there are a certain percentage of curable cases of retro-dislocation by palliative means alone.

Plastic operations alone will not cure chronic retro-dislocation.

Vaginal operations, except as adjuvants, are, as a rule, a failure.

The Alexander operation is indicated in all uncomplicated cases of retro-dislocation requiring operative treatment. It is indicated in cases of retro-dislocation with adhesions, when normal appendages exist, the adhesions in these cases first to be separated by anterior or posterior vaginal incision.

Uterine suspension is indicated when operation being required adhesions are too dense in the cul de sac of Douglas to be dealt with per vagina. Second, when dis-

eased tubes or ovaries exist, and an attempt is to be made to conserve them. Third, diseased appendages existing with adhesions, necessitating sacrifice of one or both appendages. Fourth, whenever it is necessary to choose between uterine suspension and inguinal laparotomy.

Resuscitation of the New-Born.

John J. Mulheron, in the Physician and Surgeon for September, reports several cases of reanimation after hours of supposed death.

He says that no child that does not present positive evidence of decomposition should be pronounced dead until after persistent, faithful and prolonged efforts at resuscitation have been made.

The Marshall Hall and the Sylvester methods are the first to be employed. The Schultze, Byrd-Dew and Laborde methods are also useful.

He prefers the Byrd-Dew method in cases of anemia asphyxia because it can be practised while the child is immersed in hot water, heat being very important in this class of cases. In this method the child is held with its neck between the finger and thumb of one hand, while the nates are held by the other hand. Thus held, the body is alternately flexed and extended on itself and the respiratory movements thus imitated. The extension must be to a degree which might be regarded as flexion on the dorsal surface. This is important, for the greater this extension the further is the diaphragm pulled down, and the greater the consequent vacuum in the thorax. The flexion must be to the extent of bringing the child's knees in contact with its sternum.

The Laborde method, which consists in the rhythmic traction of the tongue by the fingers covered with a thin cloth, was first used exclusively in resuscitating the drowned, those who stopped breathing under chloroform, and would-be suicides by hanging, but later it has been used successfully in asphyxia neonatorum. The number of tractions to a minute should be about twenty-five in an infant. The action results in a reflex irritation, referred to the respiratory center through the motion at the base of the tongue, the responding nerves being the superior laryngeal, glosso-pharyngeal, the lingual, and finally the phrenic.

This method of resuscitation has many points to recommend it: First, its extreme simplicity, other methods requiring more or less skill or experience. It should always be used while the body of the child

is immersed in a warm bath, thus preventing chilling.

Schultze's method, while most ingenious and feasible, has some drawbacks. It is very tiresome to the operator; it cannot be used where there is a fracture of the clavicle or of an extremity; it does not give good results in prematurely-born children; and in the low rooms of the poorer classes it is often impossible. Schultze, himself, admits the value of Laborde's method in mild degrees of asphyxiation, but doubts its efficiency in graver cases.

Removal of the Bladder with the Uterus for Carcinoma.

According to the Cleveland Medical Gazette for October, Franklin Martin has been working for some time past devising a safe method of ureteral implantation into the rectum, with the idea of the removal of the bladder in those cases of carcinoma involving the bladder and uterus.

After much experimentation on dogs he concludes that removal of the bladder as a preliminary to or accompaniment of hysterectomy for cancer in order to extend the possibilities of surgery for malignant disease of the pelvis is a justifiable operation under certain desperate circumstances, and the recorded cases in the literature of uretero-rectal and vesico-rectal surgery encourages him to predict that the operation may become something better than a desperate alternative.

In the removal of the bladder the ureters should be transplanted into the rectum or sigmoid flexure in order to (a) provide reservoir room or a substitute for the bladder, (b) in order to obtain continence, (c) in order to obtain emptying power under the control of the muscles of the individual.

The principal objection to making the lower bowels a substitute for the bladder is the supposition that nephritis, as the result of ascending ureteritis, will invariably occur as the result of uretero-intestinal anastomosis and early death will be the inevitable outcome of the procedure. This supposition is supported by (a) theoretical grounds based upon the assumption of the inherent inability of the ureters to resist the septic bacteria always found in the intestines; (b) on the result of innumerable experiments upon animals which records show almost without exception destructive infection of the kidneys; (c) the death of three cases from nephritis and pyonephritis in the forty-eight cases on record which convalesced from the primary operation.

The negative to the supposition that destructive nephritis will invariably occur

as the result of uretero-intestinal or cesico-intestinal anastomosis is supported by (a) theoretical grounds, based on the assumption that nothing but actual experience in the human individual can prove that the ureters and kidneys may not immediately resist or rapidly acquire an immunity to infectious material found in the intestines if they are artificially deflected into these organs; (b) the record of forty-eight human patients with vesico- and uretero-rectal transplantation living and a large percentage still well at periods varying from a few months to twenty-four and a half years; (c) the record of human patients with skin implantation of the ureters living at varying periods from one to eighteen years.

By the removal of the bladder and the transplantation of the ureters into the bowel the amount of pelvic tissue which can be safely removed is materially increased compared with ordinary hysterectomy, it being possible to remove the broad ligaments to the verge of the pelvis, thus gaining fully an inch laterally, and the removal of the bladder, the lower end of the ureters and the urethra when necessary, materially enlarging the field of operation anteriorly.

The operation of extirpation of the ureters and bladder should not be undertaken by one not thoroughly experienced in pelvic and abdominal surgery and by one who has not thoroughly familiarized himself with the details of uretero-intestinal anastomosis by a thorough preliminary apprenticeship in experimental operations on animals.

Spinal Anesthesia.

Surely no one is more competent to give advice in regard to spinal anesthesia than the author of this particular method.

J. Leonard Corning, in the Medical Record for October 20th, gives us some conservative jottings apropos to this subject.

The needle should be from three and a half to four inches in length. It should be fine but not overtempered. The bevel of the point should be short so that the needle will not require to penetrate the membranes very far in order to insure the deposit of the solution within them. The needle may be made of gold or platinum as it will then bend without breaking. There should be a small steel nut transfixed by the needle, sliding freely upon it, and fixable at any point of the needle's length by the aid of a small set-screw.

When the needle is thrust in, and a few drops of the cerebro-spinal fluid emerge, this nut is slid down till its lower aspect rests upon the skin. The nut is then fixed

in place by tightening the screw, and a further entrance of the needle into the spinal canal effectually prevented.

A syringe of glass, graduated up to thirty minims or more, and provided with an asbestos packing, is the best because it is so easily and thoroughly sterilized.

He used a small trocar to pierce the skin as this allows the use of a very small needle. The hands of the operator and the skin of the patient should, of course, be clean. A two per cent. solution of the hydrochlorate of cocaine is best and from 10 to 15 minims at a dose.

He says that this method can never replace general anesthesia by chloroform or ether, entirely, but that it has a useful place.

Surgery of the Gall Tracts.

William Jones in the Medical Record for October 20th, gives some observations on the surgery of the gall tracts,

He calls attention, particularly, to the diagnostic value of the point of maximum tenderness on pressure, which is over the gall bladder at or near the costal margin of the ninth rib. This point in disease of the gall tracts corresponds in importance with McBurney's point in disease of the appendix.

The diagnostic value of the presence of bile in the urine excreted during or immediately after a very brief obstruction of the common duct.

Disease of the gall tracts is of very common occurrence, and is liable to be mistaken for other troubles which closely imitates

Septic and Gonorrheal Joints.

Joint rheumatism covers a multitude of sins and errors of diagnosis says Charles A. Porter in the Boston Medical and Surgical Journal for October 18th. In a paper on septic and gonorrheal joints he shows that the gonococcus alone can cause arthritis, which, without the presence of other organisms, may be purulent.

Gonorrheal arthritis occurs not only in acute gonorrhea, but in chronic or latent stages, which persist much longer than is commonly believed.

The signs of such chronic infection in the male and female are often slight, and disregarded or overlooked by the patient and physician.

In consequences, not a small proportion of cases are diagnosed as articular rheumatism which are really of gonorrheal origin.

Sanitaria for the Tuberculous.

William Porter, in the Journal of Tuberculosis for October, urged the use of the sanitarium in the treatment of tuberculosis. He holds that sanatoria are valuable as educational institutions; teaching and illustrating proper exercise, suitable diet, etc.

They act as prophylactic agents in preventing the spread of the disease. The mental rest, proper diet, exercise, open air, bathing, can all be carried out at these places. The special symptoms are best treated in sanatoria. In the four best known sanatoria in this country, the Adirondack, the Loomis, the Sharon and the Winyah, 67 per cent. have been benefitted, and 25 per cent. cured.

We need sanatoria not only for the rich but for the poor; for tuberculosis cannot be limited to any great extent until the poor are cared for.

Surgery in China.

The Chinese do not take much to surgery, according to T. C. Minor, in the Interstate Medical Journal for October. Castration is the only operation of any importance they allow.

Dr. Watignon has written a book on Medicine in China which is freely quoted by the author. The operation is thus performed:

The party to be castrated is placed on a couch, where he is firmly bound. The operator after twisting and compressing the parts to prevent the least possible flow of blood, cuts with a rapid movement, the knife being curved and very sharp. Sometimes scissors are used or a knife with a narrow blade. A hatchet even is sometimes used. A small peg of wood or pewter in the form of a big-headed nail is placed in the urethra. The wound is washed with pepper-water; afterwards leaves of soft paper soaked in fresh water are applied to the region operated on, and the parts carefully bandaged. The patient, supported by two assistants, is walked up and down the room for two or three hours, after which he is permitted to recline on a bed. For three days after the operation of castration no drinks are allowed. After the amputation a large and triangular-shaped wound usually remains. Healing occurs by granulation, and requires about one hundred days' time at the very least. After being thus emasculated the eunuch can enter the service of the imperial palace. The mortality from this operation is only from three to four per cent. Eunuchs always carefully preserve their amputated genitals in alcohol—they call them "precious stones"—and watch carefully over

their really lost treasures, for the reason that a good Chinaman must arrive entire in the other world; that, it is to be feared, gives a feeble compensation for abstinence here below.

Strange fact! European and American physicians enjoy the greatest consideration in China, for even as all consuls, engineers and missionaries are disliked by the best class of Chinese, so much the more are all foreign physicians held in high esteem and public favor. The men who can show the Chinamen the immediate benefits are the ones who are best liked.

The true adventurous portion of the medical profession have but to read Dr. Matignon's book and then their next move will be to secure a ticket for Chiua. One doctor in China does more good than a thousand missionaries. All churches know this, and now send medical missionaries by preference.

Soldier's Ration in the Tropics.

Louis L. Seaman, in the Medical Review for October 20th, says that life in the tropics is found to produce the following conditions:

Increased body temperature, amounting on an average to over 0.5 deg. F.

Loss of body weight due to imperfect oxygen and the destructive effect of continued heat, amounting to over eight per cent. in the first year.

Diminished cardiac action due to low arterial tension and the relaxed state of the capillaries, resulting from the loss of fluids by increased perspiration.

Lower pulse rate amounting to three per cent.

Reduced pulmonary endosmosis on account of the rarefaction of the atmosphere and the low arterial pressure.

Diminished urinary secretion owing to increased perspiration, amounting to thirty-three per cent.; and a higher specific gravity of the blood in consequence.

Diminished excretion of the urea by the kidneys amounting to ten per cent.

Increased secretory activity of the liver caused by the irritation resulting from the loss of fluids and relaxation of the capillaries, and the decreased elimination of urea by the kidneys. This increased activity frequently amounts to congestion, which, if continued, soon becomes chronic with danger of impaired function.

Diminished secretion of saliva, mucus, gastric and pancreatic juice, and bile, in consequence of increased perspiration and the higher specific gravity of the circulating fluids.

Dependent on these are dryness of the

throat and fauces, exaggerated thirst, weakness of appetite, and impaired digestion.

In order to cope successfully with these conditions it is necessary to relieve the digestive apparatus of all superfluous labor. The food should be well cooked to prevent alimentary fermentation, and should contain as little of the albuminoid principles taken from meats and fats as is compatible with the repair of the system. Meat, in the fresh state, being the most perishable of all foods, should, for campaign requirements, be replaced as largely as possible with dried and smoked varieties. The creosote in smoked beef being a gastric stimulant and intestinal disinfectant, when proneness to diarrhœa exists, is a decided advantage. Salt and tinned meat is objectionable. The nutritive value of salted meat is reduced over one-third owing to the solution of the albuminates by the chloride of sodium, and is rendered less digestible through the hardening of its muscular fibre; and tinned meats produce after continued use impairment of digestion. On the contrary, smoked meats are not prone to decay, they retain their nutritive qualities, are easily digested, concentrated and far more portable for field use.

The energy of the system should be derived as largely as possible from easily digested carbohydrates, instead of from meats and fats. The metabolism of both nitrogen and fat produce much unnecessary heat, through the splitting up of the proteids and the emulsification of the fats. Carbon necessary for nutrition can be provided either in the form of fats or carbohydrates.

Fats are more suitable for tissue growth and repair than carbohydrates alone. A large proportion of fat, however, is a rule not well tolerated by the digestive organs for continued use, except under conditions of climate like that of the Arctic regions.

Dujardin-Beaumetz regards the average daily allowance of fats as 55 gm. The great purpose of fat in the food is to diminish albuminous metabolism, and it is, therefore, regarded as an albumen-sparing food.

As stated by Baumer, "if flesh alone be given, large quantities are required in order that nutrition and waste may balance one another, but if fat be added the demand for flesh is less."

Singer's Nodes.

In the Journal of Laryngology for October Capart of Brussels discusses the treatment of singer's nodes. It may be hygienic medical or operative. While several cases have been cured by prolonged silence, he says this method can not be trusted. Rest

may have a beneficial influence on the laryngitis but does not affect the nodules under medical treatment he includes sprays and insufflations of astrigents and antiseptics, painting with nitrate of silver, and specially cauterization with nitrate of silver or chromic acid. A while series of instruments, more or less ingenious, have been invented for these purposes. All these means are ineffective, if not actually dangerous; the agent employed spreads out, acts beyond the desired limits, and may produce an acute inflammation, whose extent and duration cannot be foretold.

One must therefore always have recourse to operative treatment, either ablation or destruction by galvano-cautery.

As a general rule it is not safe to use instruments acting on the principle of a punch. There is too great a risk of seizing more than one intends, and of cutting out the subjacent tissue and so spoiling the voice for ever. The finest and most delicate forceps ought to be used; for example Schmidt's or Jurasz's, or the forceps which the author has recommended for some years, which act either in an antero-posterior or in a lateral direction.

One need have no fear of removing the whole node right down to its base. It suffices to recall the brilliant success obtained by Professor Labus, by his decortication of the cord (*scorticamento*), to dispel all fears of going beyond the disease. This, indeed, is essential to cure.

Galvano-caustic treatment is reserved for those cases only in which the growths are too small to be seized between the blades of a forceps, or too smooth the border of the cord after an insufficient ablation. In any case the growth may recur. The best preventive is strict hygiene. Prolonged, absolute silence must be insisted on after the operation, and singing forbidden for at least a month; also complete change of method, of register, and even of master if necessary. Lastly, a visit to a watering-place, Ems, Mont-Dore, or Luchon, according to the indications.

Syphilitic Sciatica.

According to J. K. Baudny, in the St. Louis Medical Review for September 29th, the treatment of sciatica due to syphilis is essentially that of syphilis itself. Any obvious constitutional disorder must be provided for, the rest in bed constant and prolonged.

Few things are as valuable as dry cups, if you use them thoroughly and early. Very effective is a double or even a triple row of dry cups all around and over the notch and

down the leg, along the nerve branches to the ankle. There should be some three dozen cups simultaneously applied and they should remain on one-half of an hour. but not used so as to blister. The measure is repeated next day, then two days later, and this alone may answer. Mustard plasters three inches wide from notch to knee or ankle. Combined use of ice and splint, rest and massage, and crutches later on. Mercury, of course, but the iodid of potash perhaps being the remedy per excellence; opium and thein to relieve pain; galvanism, general and local, particularly the continuous, uninterrupted current, and anodic applications; quinin pushed to cinchonism; strychnin, arsenic, phosphorus and iron are mentioned in the order of their relative importance. All drugs that increase the quantity of blood in the cord should be administered, namely, strychnin, is the king of nervous tonics, at the same time directly producing the happiest effect in the quantitative increase of blood in the central nervous system and augmenting its polarity.

Sterilization of Catgut.

In a continued article on the technique of surgical gynecology in the International Journal of Surgery for October, Augustin H. Goelet recommends the following method of preparing catgut:

Cut the catgut into the desired lengths and wind twelve strands into a figure of eight form, so it may be slipped into a large test tube.

Bring the catgut gradually up to a temperature of 80 C. and hold it at this point for an hour.

Place the catgut in cumol, which must not be above a temperature of 100 C.; raise it to 165 C. and hold it at this point for an hour.

Pour off the cumol, and either allow the heat of the sand bath to dry the catgut or transfer it to a hot air oven at a temperature of 100 C. for two hours.

Transfer the catgut, with sterile forceps, to test tubes previously sterilized as in the laboratory in which it is preserved for use.

If the catgut comes in contact with the bottom of the test tube it may become brittle; hence a piece of sterile cotton is placed in the bottom of the test tube and the heat is slowly and gradually raised to the required point. Care must be observed in employing the process to prevent the ignition of the cumol, which is very inflammable, and for this reason a copper wire netting should be placed over the beaker glass containing the cumol while the heat is applied.

Suppurative Pericarditis.

Charles B. Porter in the Boston Medical and Surgical Journal for October 18th, gives some practical points on the surgical treatment of suppurative pericarditis.

He prefers open incision to aspirating and gives the following method of procedure.

An incision from the middle of the sternum outward over the fifth costal cartilage to its junction with the rib.

The soft parts are cleaned from the cartilage with periosteum elevator, care being taken not to wound the pleura on the under surface. The cartilage is divided with bone forceps from the rib and the sternum. The internal mammary artery and vein are thus exposed, ligated in two places and divided between. The triangularis sterni is separated from the sternum and pushed to the left.

A little careful dissection with the director in case fat is encountered exposes the pericardium, which is normally much thicker than the pleura. An aspirating needle should now be introduced, if this has not been previously done, in order to corroborate the diagnosis. If confirmed, the knife should follow the needle. The incision in the pericardium is best made obliquely downward and outward, beginning close to the excised border of the sternum. The edges of the pericardium should be stitched to the soft parts.

Irrigation should always be employed, with the object of removing any masses of fibrin which may lie at the bottom of the cavity; and if there are many such masses, it should be continued until the fluid returns clear. The fluid may be weak sublimate or carbolic solution, or salt solution, according to the preference of the operator. The fluid must be warm and must have free exit. With this exception no harm has resulted from irrigation, which has been practiced in more than half the cases.

Drainage is best provided by two rubber tubes, one long and reaching to the bottom of the sac for the inflow, and a short tube just entering the sac for the outflow. As the discharge diminishes one tube may be removed and finally gauze drainage inserted. Gauze drainage has proved adequate from the first, but where the fluid is thick or flocculent, tubes give the only adequate facilities for the subsequent daily irrigation.

The after treatment must, of course, be directed to two ends: (1) Systematic treatment, consisting of forced feeding and free stimulation, and (2) the care of the wound and the maintenance of drainage. The wound should be irrigated daily and

the patient, if his strength is sufficient to allow it, turned on his stomach to facilitate drainage.

He concludes that pericardotomy is indicated in all cases of suppurative pericarditis.

Because of the uncertain and varying relations of the pleura and because of the anterior position of the heart, whenever the pericardial sac is distended by fluid, aspiration of the pericardium is a more dangerous procedure than open incision, when done by skilled hands.

Incisions of the pericardium can be done quickly and safely by resection of the fifth costal cartilage and in many cases under local anesthesia.

In many cases of serous effusion open incision without puncture will offer less risk and speedier cure than aspiration.

The method and detailed technique of the writer proposed in 1897 have been followed out by the majority of recent operators.

Snake Bite.

Joseph McFarland in the International Medical Magazine for September writes of venomous snakes, their bites and how to treat them. Briefly outlined the treatment is immediately interruption of the circulation of the bitten member, so as to prevent absorption of the poison; free incision and enlargement of the fang wounds and forcible suction to extract the poison; hypodermic injection of three to six drops of a fresh 10% watery solution of chlorid of calcium into about a dozen different areas about the wound; strychnia given hypodermically to stimulate the respiratory center; immediate and frequently repeated hypodermic injections of ten to twenty cubic centimeters of the antivenomous serum, or as Calmette calls it "*antivenene*."

Skin Troubles and the General Practitioner.

Chas. Williams, in the Medical Times for October, discusses the treatment of same skin troubles by the general practitioner.

Paget's disease of the nipple may be hard to differentiate from eczema, but once the diagnosis is made enucleation is the proper treatment.

Tubercular syphilide will respond to mixed treatment internally without any local application.

Seborrhea or dandruff is a common disease; if there are crusts they should be first soaked in oil and then washed with tincture of green soap; this should be done two or three times. After the crusts are

removed use resorcin, salicylic acid, sulphur or tar. Resorcin can be used in the strength of 15 grains to the ounce of water with two or three minims of glycerine and one-half drachm of alcohol. If there is falling of the hair add quinine alkaloid, five grains to ounce; specify alkaloid or the druggist may put in a salt.

Lupus vulgaris can only be treated by destructive measures as arsenic salve, or excision.

Suppuration of the Parotid Gland.

H. P. Hamilton, in the Western Medical Review for October, writes of some clinical cases of suppuration of the parotid gland.

He tells us that suppurations in the parotid gland may take place in any inflammatory disease.

Suppurations of parotid gland are generally, if not always, due to septicemia.

Septicemia is not necessarily due to the so-called pyogenic germ.

Cases of mumps where the testicle is involved are always suffering from septicemia.

Nearly all cases with acute suppuration of this gland are delirious.

All cases can be relieved of the delirium in twenty-four hours by early incision.

Where suppuration exists in the parotid, death will probably follow if no incision be made to relieve the same.

The incision should be made to include almost half the circumferences of the gland.

It is not necessary to curette more than is necessary to remove what pus comes into view, for suppuration invariably follows for several days thereafter.

Where incision is made early the function of the gland is restored.

Subclavian Deligation.

S. C. Graves, in the Medical Record for October 6th, describes a new triangle of the neck to which the third portion of the subclavian artery bears a constant relation. The boundaries of the triangle are, externally, the cord of the brachial plexus; internally, the scalenus anticus muscle; inferiorly, the first rib.

Within these the subclavian artery can always be found. It is an ultimate triangle, incapable of further subdivision, because its boundaries come into actual touch with the vessel, no other tissue intervening. He recommends, therefore, as a guide in the ligation of the subclavian, the cord of the brachial plexus instead of the scalenus anticus muscle

Syphilis and Diseases of the Nervous System.

According to Clarence Bartlett, in the Hahnemanian Monthly for October, there is a close relationship between syphilis and diseases of the nervous system. He says that 90 per cent. of all his cases of locomotor ataxia were syphilitic in origin.

As regards the diagnosis of syphilis of the nervous system he says that age is important, as it is especially frequent in young adults. He believes that 80 per cent. of all cases of organic diseases of the nervous system occurring before middle life are due to syphilis. Headache and paralyses are important. Hemiplegias being nearly always dependent upon syphilitic endarthritis. Paralysis of the ocular muscles is pathognomonic.

In reference to insanity he thinks the statistics are misleading. General paralysis of the insane is above all else specific in its origin.

Treatment of Burns.

H. N. Rosser, in the Alabama Medical Journal for October, reports several cases of burns, and gives his method of treatment.

He does not remove the clothing until he is ready to apply the dressing, as exposure to the air is injurious. Sterilized gauze smeared with a two per cent. carbolized vaseline is the best application, and this is held on not by roller bandage, but by broad pieces of gauze slit in several places similar to a Scultetus.

This is allowed to remain for three days, unless there is some urgent necessity for its earlier removal, and the same ointment is reapplied. No water is used in the dressing, but the wound is cleaned by dry sterile gauze.

After separation of the slough, if any, dust on acetanilid crystals regardless of the extent of the wound.

Tobacco.

H. A. Minor, in the Mississippi Medical Record for October, writes on the use and abuse of tobacco.

As a poultice in hernia and as a suppository in hemorrhoids it may be of some use. Its abuse is the tobacco habit, and he comes down hard on the habitue. He condemns all the methods of habitual use, but says that it depends upon the frequency more than the manner, and in this way the cigarette is especially harmful. In boys and young men the poisonous effect is more marked and serious damage to the nervous system is easily done.

It is uphill business to buck against so universal a habit, but he thinks the doctor is the man to do the bucking. The great trouble is to get the doctor to quit himself.

Preaching against a thing we do ourselves will not convince any one.

Tuberculosis of the Kidney.

In the Medical News for Oct. 20th Samuel Alexander, in the course of some remarks on the pathology and surgical treatment of urinary and uro-genital tuberculosis, says that operations for tuberculosis of the kidney may be divided into three classes: (1) Operations in those cases in which the kidney is primarily affected and in which the diagnosis of urinary tuberculosis has been made while the infection is purely bacillary; (2) Operations in cases in which the tuberculosis is primarily in the kidney and in which there is a mixed infection, but without tuberculous disease in any other portion of the urinary tract; (3) Those cases of advanced tuberculosis of the kidney with secondary tuberculosis of other portions of the urinary tract. In all cases of tuberculosis of the kidney in which an operation is not absolutely contraindicated by the general condition of the patient, surgical interference is not only justifiable, but is imperatively demanded. The results of operation, however, will vary within very wide limits, and at the present time it is impossible to generalize in regard to the prognosis of any of the three classes of cases mentioned above. As a general rule when operation upon the kidney for tuberculosis is indicated the choice should be given to nephrectomy. Recent statistics show that the immediate mortality of nephrectomy and nephrotomy is about equal, but the remote results are greatly in favor of nephrectomy. We find that 61.71 per cent. of cases died during the first year after nephrotomy, while only 12.54 per cent. died during the first year after nephrectomy. Of 63 cases operated upon by nephrotomy 39 died during the first year, and of the 24 that survived all had permanent fistulæ. Of 335 cases operated upon by nephrectomy 42 died during the first year by a spread of the tuberculous process to other organs. Of the 293 which survived the operation 33 were living at the end of the first year, 41 lived three years, 4 lived five years, 7 lived six years, and 2 lived eight years. A very small proportion of these cases suffered from fistula, namely 7 in 105 operations. It would seem, therefore, that nephrectomy should always be the operation of choice where only one kidney is affected, and the operation is frequently indicated even when

the other kidney is the seat of beginning tuberculous infection, if the patient be put in surgical condition. The question has been frequently discussed as to the necessity of removing the ureter in cases of nephrectomy performed for tuberculosis. To do this increases the risk of the operation and frequently subjects the patient to unnecessary risk.

In early cases of renal tuberculosis the upper part of the ureter is alone affected. In advanced cases in which the entire ureter is involved the operation upon the kidney is only palliative; and to remove the kidney simply increases the risk of the operation without doing any permanent good.

The Zoologic and Geographic Distribution of Tuberculosis.

W. A. Evans, in the Journal of the American Medical Association for October 20th, in a discussion of this subject concludes that every animal having tuberculosis is a center for the maintenance and spread of tuberculosis. We must admit great variance in danger, according to the animal affected. The danger from the cow, by reason of the fact that we drink milk unboiled, is great. The danger from the horse is much less. In spite of this variance the proposition commends itself. Each of the excretions may contain tubercle bacilli. These go either directly into man, there to run the gamut of his defense, or into the world, there to perish, as a usual proposition, but, sometimes, to persist and threaten men and other animals.

Animal, and even aviary, tuberculosis is not identical with, but is related to, human tuberculosis. The translation of human into animal and aviary tuberculosis is also possible. A great deal of accurate, painstaking work has been done on the question of the transformation of human into bovine and avian tuberculosis, and vice versa.

Inhalation and ingestion are the most frequent means, by which tuberculosis is spread from man to man, from man to animals, and from animals to man.

The geographic distribution or tuberculosis is proof that the organism's extracorporeal or saphrophytic life is of secondary importance. Argument in support of this proposition is found at every step by the bacteriologist. If this bacillus is found regardless of temperature, of soil moisture, of total rainfall, of elevation from the sea level, of prevailing winds, then it must follow that its essentials are resident in the animal body, where environment is more uniform. Nuttall's observation that the

number of tubercle bacilli expectorated in the twenty-four hours is about three billions, would prove that only an infinitesimal number live outside the bodies of animals. The lesser number of cases of tuberculosis at high altitudes, away from cities, in dry climates, etc., is due to the improved condition of the people and of their hygienic conditions, such as lack of crowding, well-ventilated habitations, out-of-doors life, vigorous existence, etc., rather than difference in bacilli or in the effect of extracorporal environment on bacilli. However, we cannot altogether deny the power of sunshine and drying on the bacilli that lie exposed.

There is abundant evidence that the bacillus is modified by the bodies through which it passes. Such is the teaching of the work of Bang, of Smith, of Nocard, of Jones and many others.

The disease in the death rate is more apparent than real. It is above all a disease of crowding and therefore of cities. At some future date, in determining the question of favorable location in order that a man may escape tuberculosis himself, shield his family from it or get well, once the disease has been contracted, we must ask the following questions: *a.* What is the altitude? *b.* What is the percentage of sunshine and cloud? *c.* What is the soil moisture? *d.* What is the atmospheric moisture? *e.* What is the population per acre? *f.* What is the amount of tuberculosis present in men? *g.* What is the amount of tuberculosis in animals and birds? *h.* Is the mean temperature approximately that of the district from which the man is to go?

The Physician as a Sanitarian.

In the course of an article on this subject in the Cincinnati Lancet-Clinic for October 20th, Hugh A. Cowing gives some pointers in regard to small-pox epidemics. He says that domiciliary quarantine is ineffective in preventing the spread of small-pox, especially during an epidemic.

It is economy, in the beginning of an epidemic, to provide the most comfortable and commodious hospital quarters with the best medical and nurse skill obtainable.

Then let the authorities and medical profession unite to secure the removal of all afflicted to the pest hospital.

As a rule, a well-appointed hospital, with faithful medical and nurse service, offers better conditions for recovery than if the patient remains at home.

By early removal of patients from the

home the danger of infection to others is greatly diminished.

The details connected with the removal of the diseased to the hospital, the burial of the bodies, the disinfection of houses and personal quarantine of infected persons, and persons exposed to infection, and the liberation of the infected from quarantine, should all be under the supervision of the health officials.

During an epidemic of smallpox all public meetings should be discontinued, and persons should be warned from entering houses where sickness is known to exist until the character of the disease is clearly defined. Fool-hardy and criminally careless persons should be prosecuted to the full extent of the law.

Railroad quarantine should require not merely disinfection of baggage, but also a change of all clothing possibly exposed, or a thorough disinfection of the same.

To suppress epidemic smallpox there must be a mutual and intimate bond of harmony and support between health officials, physicians and citizens.

An unusual prevalence of varicella, especially of a severe type, should be reported by the attending physician. Under such circumstances the health authorities should take all precautions. The history of small-pox epidemics shows that in many instances they have been preceded by varicella.

The history of this and of former epidemics proves that vaccination, isolation and disinfection are the three important factors in stamping out an epidemic of smallpox, and, unless necessity arises, there should be no hesitation on the part of the authorities in enforcing all these measures.

Aseptic bovine lymph should always be used. All care and attention should be thrown around the vaccinated subject, and every precaution should be taken to protect the vaccine wound against infection.

Traumatic Joints.

Homer Gage, in the Boston Medical and Surgical Journal for September 27th, writes of sprains and contusions of joints, excluding injuries complicated by fractures, dislocations or external lacerations.

His opinion is that all injuries to joints accompanied by loss of function are always attended by more or less laceration of the tissues in or about the joint.

That the delays in the restoration of function are due in most instances not to any complicating diathesis, but to the changes incident to the repair of these lacerations and their effects.

That such delays are best avoided by an

early resort to massage and active or passive motions, and are favored by too long a continuance of rest and fixation.

When such delays have occurred they are best overcome by more vigorous and persistent manipulation, supplemented by the application of heat or such other agents as may best stimulate the local circulation and favor the elasticity of the tissues.

Treatment of Consumption at Home.

Joseph Eichberg, in the Medical News for October 6th, writes of the treatment of consumption at home. Good air is very important and patients should sleep out doors from June to November. Good food comes next and it should be in abundance. crowd the food and the patient will come to enjoy it. Good rest whenever there is fever, if all the time then all the time. No exercise while there is temperature. Good cheer, no Job's comforters, but constant encouragement from physician and friends. Medicines are more or less valueless except to be doing something.

Treatment of Fibroids in the Non-Pregnant Uterus.

E. F. Fish, in the Annals of Gynecology and Peditry for October, gives the indications for certain plans of treatment in fibroids of the uterus.

He says that myomectomy is the operation of choice:

1st, where tumor is pedunculated.

2d, when single, whether subserous, interstitial, or subcutaneous, and can be enucleated without loss of uterine tissue and the tumor cavity closed and covered with peritoneum.

3d, when the desire for an heir outweighs all other considerations.

That hysterectomy is indicated:

1st, when the tumor involves so much of the uterus that a cavity too large to be properly closed and covered with peritoneum would follow its removal.

2d, where several tumors exist, especially little nodules.

3d, when the adnexæ are diseased to such an extent that they must be sacrificed,

4th, when the disease ceases to be local.

5th, when hemorrhage, pressure, or pain, is a persistent symptom.

6th, whenever malignancy is suspected, or the tumor is of rapid growth.

7th, after the change of life.

That palliative treatment is indicated:

1st, when the patient is much reduced from loss of blood, as a prelude to radical cure.

2d, when the existence of chronic nephritis, diabetes, tuberculosis, or other constitutional disease forbids radical cure.

3d, when the patient is past forty years of age, the tumor small, the main annoyance hemorrhage, and she is desirous of awaiting the effect of the menopause.

Tuberculosis of the Skin.

A. G. Drury, in the Cincinnati Lancet-Clinic for October 6th, in discussing the treatment of tuberculosis of the skin, quotes the following lines of Leloir.

To avoid, as far as possible, bringing the skin into contact with the tuberculous virus, whatever may be its origin. The obvious difficulty here presented is, how shall we make people in apparent good health, and who are not engaged in the care or treatment of tuberculous subjects, aware of the danger of such contact when the disease is almost everywhere present, either manifestly or concealed?

To treat antiseptically every wound that may have been contaminated by the tuberculous virus.

To destroy, as rapidly and completely as possible, every deep tuberculous deposit that may inoculate secondarily the integument.

To make aseptic every part of the skin soiled by fluids that contain tuberculous virus, as sputum, fecal matter, uterine discharges, etc.

To guard with the greatest possible care the skin of patients afflicted with internal tuberculosis.

To watch over the general health of those descended from tuberculous subjects by a careful attention to hygiene and general therapeutics.

Tuberculosis.

J. A. Storck, in the New Orleans Medical and Surgical Journal for October, gives his treatment for some of the symptoms of tuberculosis. For night sweats he uses ten grains of camphoric acid dry on the tongue at bed time. For the cough codein, dilute sulphuric acid, spts. chloroform and syrup of wild cherry. For vomiting cocaine hydrochloride and menthol in aromatic elixir; for intercostal neuralgia, hot water compresses, counter-irritants, morphine 1-8 gr. For hemoptysis, ext. Hydrastis canadensis fld., morphine, ergotin, atropin sulph. ice. For building up the general system he prefers strychnine to any other drug. He closes by emphasizing the fact that many cases of tuberculosis can be cured.

Therapeutic Application of Psychology.

The profession is willing to admit that a few diseases may be relieved by psychological methods, but as a cure-all they have no time to listen to a long list of diseases successfully treated by this means. Willis B. Parks, in the *Atlanta Journal-Record of Medicine*, shows that it has some basis for a moderate claim. The brain is dual in its nature or in its action, which amounts to the same thing, and has two sets of functions, the automatic and the voluntary. Not only is this true of the brain but also of the nerve unit, the neurone, with its neuraxon and dendron.

Now all growth, nourishment and repair is dependent upon the automatic brain and hence by suggestion we may so influence the body as to produce a visible result. In fact, it is through this half of the brain that we get our results in giving medicines or any other remedial agent. The action of curative agents in general deserves a more careful study at the hands of the regular profession than it has received up to this time. Medicine is a progressive science and every grain of truth that has a possible bearing on this progress should be examined with care. The quack will take the grain and mix it with bushels of chaff and the amount of chaff serves to disgust the honest worker, but he must remember that the valuable grain is hidden in the depths somewhere. To find it is to be repaid for all the worrying search.

Tertiary Syphilis of the Nose.

In the *St. Louis Medical Review* for October 20th, Robert Levy has an article on Tertiary Syphilis of the Nose.

After reporting several cases he says that the treatment should be prophylactic, local and general. By active measures early carried out, one may avoid much of the hideous deformities resulting from destruction of tissue and contraction of scars. Mercury and iodid of potash should be actively administered, properly constructed tubes may be inserted to avoid adhesions, and the nose may be supported by an artificial bridge. (Kyle, DeBlois.) Should necrosed bone be detected, we should attempt its removal, provided, of course, the sequestrum is well separated. Mackenzie, DeBlois, Schech and Hellmann have called attention to the dangers of curetting too early or too vigorously. The sharp Volkmann spoon should be used, however, whenever necrosis has resulted to such an extent that the sequestra may with slight difficulty be removed. Gummatous deposits may be left to the ac-

tion of internal remedies unless of such a size as to interfere with the functions of the parts. It may become necessary to crush a large sequestrum before its removal from a narrow nasal fossa, and at times the snare will be found a useful aid. Rouge's operation has at times been undertaken in instances in which it was impossible to effect the removal of sequestra by the natural openings. Besides operative local treatment, much may be done for the comfort of the patient by thorough and frequent cleansing with a warm one per cent. solution of potassium permanganate, the application of tincture of iodine, and the insufflation of iodoform. Perforations should be treated by cauterizing their margins and applying an ointment of calomel and euphraphen, each 20 grains, and vaselin one ounce.

Here as in other syphilitic manifestations very great attention should be paid to constitutional treatment. As a general thing, mixed treatment is to be advised, and both mercury and iodid of potassium should be given in gradually increasing doses and to the full limit. The effect of potassium iodid may be largely enhanced by combining it with other iodids, notably iodid of strontium, ammonium and sodium. Much has been done toward the correction of resultant deformities by plastic surgery, and the introduction of artificial bridges. The removal of external scars may be at least partially accomplished by certain heroic measures which have for their object the destruction of the scar tissue and the stimulation of the surrounding skin.

Umbilical Hernia.

J. Coplin Stinson, in the *New York Medical Journal* for September 29th, describes a new method of operating for the radical cure of umbilical hernia in children and adults.

After a careful study of all the different operations he concludes that with careful and antiseptic precautions, provided the operator is skilled and familiar with the special anatomical and pathological conditions associated, an operation for the cure of umbilical hernia has a mortality of about nil, or less than that associated with the condition previous to the operation. That sterilized chromicized tendon or, in its absence, carefully chromicized catgut, is the most suitable material for buried sutures. That before closing the wound (*a*) the sac should be removed, the contents cleared out, the edges of the serosa overcorrected and then united with a layer of continuous sutures; (*b*) the internal ring or opening in

the transversalis fascia should be closed by continuous sutures; (c) the internal ring should be reinforced and the remainder of the abdominal wall closed by uniting the broad edges of the fascia (the *linea alba* and *lineæ semilunares*) in two layers, avoiding tension by loosening one or both of the recti muscles from their sheaths, and bring them together in the median line by sutures to fill and close the gap; the recti muscles are also to be used to close the breach when the fascial layers are atrophied; (d) the skin is closed with continuous stitches without drainage. That in the immense majority of suitable cases the patients are cured by the operation. That the operation described (a) closes the breach in the abdominal wall firmly and durably and without tension; (b) has all the advantages of other operations; and (c) that, having many additional advantages, and fulfilling all the indications for a radical cure, it should be followed by the best results.

The Upright Position in Operations upon the Nose, Throat and Ear.

In the New York Medical Journal for October 13, Thos. R. French recommends the upright position in operations upon the nose, throat and ear. He has devised a special operating chair for this purpose.

The method of placing a patient in and fastening him to the chair is as follows: After the anæsthetic has been administered in the horizontal position long enough to overcome in part the muscular rigidity, the patient is lifted upon the chair, which is tilted very far backward, and held in position by an assistant. This brings the knees about on the level with the head, and the circulation is not disturbed. Before anæsthetizing, and before the body is wrapped in a blanket, a bandage of stout linen or cotton flannel, four inches wide and twelve feet long, is passed across the back over the scapulæ, brought out under the axillæ, and turned up over the front of the shoulders. After the patient is in the chair, in the extreme tilted position, the back of the chair is adjusted so that the head of the patient will fall into the rest at the top. The shoulder straps are then passed through the openings on each side of the head rest, turned downward and caught under a hook on the back of the chair, then turned upward again and, after being caught over the upper end of one of the side posts, are tied together. This draws the head and upper portion of the patient's body firmly to the back of the chair. Two broad leather straps fastened to the back of the seat of the chair, one on

each side, are then passed around the hips and abdomen and caught together with a clamp buckle. The legs below the knees are fastened with straps in a similar manner and the adjustment of the patient to the chair, which takes but a minute, is completed. The chair and patient are carried to the place of operation, the back chair is slowly raised, and by the time the upright position is reached the patient is sufficiently anæsthetized and is ready for operation.

His claims for this method are:

The very considerable reduction in the amount of blood lost.

The reduction of the chances of ear complications, by securing complete drainage of the nasopharynx of blood.

The ease, thoroughness, and accuracy with which operations can be done in the shortest time, by the retention of the usual relationship between operator and patient.

Urethral Stricture.

In the Medical Fortnightly for September 25th, Reginald Harrison makes a report on the remote results of operative treatment of stricture. He arrives at the following conclusions:

That there is evidence to show that in peri-urethral strictures of the deep urethra the effects of divulsion as practiced in Perreve's and Holt's operations may be limited to rupturing the dense stricture bands in the submucosa of the urethra, whilst the mucous membrane itself escapes any serious injury or laceration, and is rarely restored by stretching to its original dimensions. Here a permanent cure may result.

On the other hand, where the mucous membrane is in itself the seat of stricture and forms part of the latter structurally, it is necessarily torn or lacerated by the process of a sudden divulsion, and the pathological condition consequently becomes assimilated with that of traumatism of the urethra from external violence accidentally applied, which are followed by strictures of the most contractile and recurrent form.

That there is evidence to indicate that where the entire thickness of a stricture can be included within an incision of moderate dimensions made by an internal urethrotome, the normal calibre of the urethra may be completely and permanently restored. Where this happens, it may be concluded that all the fibres of contraction constituting the stricture were divided at the time of operation. And further, that the converse is equally true. There is also evidence to show that the absence of recurrence, under such circumstances, is not

necessarily dependent on the use of a bougie, though the latter is a precautionary measure which should invariably be advised.

That, in the case of multiple strictures, or strictures of the deep urethra of considerable dimensions, either in their length or thickness; treated by an internal incision of corresponding proportions, apart from other considerations, the tendency to recontraction and recurrence with an additional amount of cicatricial material, is frequent; the latter being probably due to the circumstances under which healing takes place in wounds of these dimensions so situated.

That lesions of the urethra demonstrate in various ways the poisonous effect that unprotected and confined urine is capable of exercising, both on the body generally and on the tissues in contact with it, and that the liability to such effects is greatly diminished where drainage and irrigation renders these conditions of the urine unlikely.

That in the case of recurring strictures previously treated by incision and in primary strictures of such length or extent as to require an internal section of a corresponding size, or as to which there might be doubt as to whether it would be safely possible so to include them, that for the purposes of the operation and its results such wounds should be made with due regard to other surgical principles, in addition to the one pertaining to the division of the contraction.

That there is direct evidence to show that the tendency to recontraction and recurrence of stricture after internal urethrotomy is largely diminished by the concurrent employment of systematic and efficient urine and wound drainage, such as the combination of external urethrotomy perineal puncture, affords.

Vision in Railroad Service.

Frank Allport in the Journal of the American Medical Association for October 13th, discusses the question what amount of visual defect should disqualify in railroad service.

He sent out inquiries to a number of different roads and found the rules varied in nearly every road.

He says that the essential principle to be advocated is that railroad corporations shall require a scientific and correct entrance examination of the eyes and ears of those employees at all to be concerned with the active operating of trains, or in giving or receiving signals.

Such examinations are best made by regularly appointed eye and ear surgeons.

But if such a course is not deemed advisable, the company surgeon, aided by his medical assistants, may conduct them, with the understanding that all doubtful cases shall be sent to a regularly appointed eye and ear surgeon. Non-medical men shall never conduct the examinations.

There shall be two general standards of visual and aural requirements, viz., those for new men hoping to enter the service, and to be actively engaged in the operation of trains, and in giving and receiving signals, and secondly, those men engaged in similar work, who have been uninterruptedly in a company's service for five years, and who have, therefore, a right to be called old employees.

New men shall be required to possess perfect color sense. They shall also have a vision of 20-20 in each eye, without glasses, and have healthy eyes, and not over two diopters of hypermetropia. They shall also hear the whispered voice at 20 feet in a quiet room, and have healthy ears.

For purposes of graduated requirements old employees shall be subdivided into two classes as follows:

Class A.—Engineers, firemen, conductors, brakemen, switchmen, signalmen, switch tenders, and engine dispatchers.

Class B.—Track foremen, bridge foremen, crossing flagmen, bridge tenders, gatemen, train baggagemen, telegraph operators, station agents, and station baggagemen.

Employees enumerated in Class A shall not be retained in such positions of vision sinks below 20-30 in one eye and 20-40 in the other, or if the whispered voice cannot be heard in a quiet room at 15 feet by one ear and 10 feet by the other. Employees enumerated in Class B shall not be retained in such positions if vision sinks below 20-40 in one eye and 20-50 in the other, or if the whispered voice cannot be heard in a quiet room at 10 feet by both ears. Employees, and especially engineers and firemen enumerated in Class A, must reach the visual standard without glasses when on duty. Employees enumerated in Class B may reach the visual standard with glasses, and will be allowed to wear glasses when on duty, and will be required to do so if the wearing of glasses is necessary to bring vision up to the proper standard. All the employees shall have perfect color sense.

Re-examinations shall be made of all men every three years, and after a severe illness, or accident, or any occurrence which seems to cast doubt on the visual or aural capacity of an individual. Re-examinations shall be made more frequently on

men known to be excessive users of tobacco, or to be suffering from syphilis, albuminuria, diabetes, or acute or chronic eye and ear disease. Men shall always be examined before promotion.

Men known to be excessive users of liquors shall not receive employment.

It would seem as if these rules were sufficiently comprehensive and liberal to be adopted by any railroad; at the same time they are believed to be sufficiently stringent to exclude dangerous eyes and ears from the service.

Widal Reaction.

In the Richmond Journal of Practice for September, Arthur R. Guerrard writes of the present status of the widal reaction as a diagnostic test in typhoid fever.

He says that this test is simple and easy of performance by any one versed in bacteriological technique.

The serum reaction is never present in other diseases, if correctly tested and in the proper dilution, as is so often the case with the diazo reaction of Ehrlich. It is better adapted for routine employment than are any of the methods now in use for isolating the bacillus from feces or urine. It is certainly safer than spleen puncture; and it is not so difficult as, though far more reliable than, the leucocyte count. The reaction does not appear, as a rule, during the first few days of the disease, but it is usually manifest before the rose-colored eruption appears, though occasionally it is very late in appearance, and in rare cases may be entirely absent. A negative result cannot be considered as having much significance, but a positive reaction when present—previous typhoid or an earlier reaction being excluded—is almost as strong evidence of the existence of the specific infection as the actual demonstration of the typhoid bacilli.

Thus, while the Widal reaction has undoubtedly limitations, it is nevertheless of inestimable value as an aid to the clinical diagnosis of irregular or mild cases of typhoid fever.

X Ray Picture and Fracture of the Radius.

In the Boston Medical and Surgical Journal for September 27th, E. A. Codman gives a study of the X Ray plates of 140 cases of fracture of the lower end of the radius.

True Colles' fracture formed but 46 per cent. of the 140 cases. From a careful study of these cases he concludes that a

knowledge of the position of the fragments is necessary for intelligent treatment.

That the application of padding and splints should vary according to the displacement shown in the skiagram.

That if the x-ray shows that marked deformity is still present after the splints have been applied, ether should be given, and another energetic attempt at reduction made.

That concomitant fracture of the ulnar styloid occurred in at least 62 per cent. of 140 cases, and in 39 cases in which this process was obscure in the skiagram are deducted, fracture occurred in 86 per cent.

That in true Colles's fracture pressure over the anterior edge of the upper fragment should be avoided and cross traction should be used to correct the radial displacement of the lower fragment.

That statistics of the results of Colles's fracture are not of value unless the pathology of each case is determined by a skiagram.

The Leading Editorials of the Month.

The Poison and the Antidote Evolved from the Same Elements--A Law of Nature and a Clue to a Scientific Therapeutics.

The Medical Times says that it is an interesting fact that the soil from which emanates the most violent forms of malarial poison furnishes also in the flora which receives life and strength from its bosom an antidote to the poison. In the cinchona tree, the eucalyptus, as well as the cedron and numerous shrubs, we have the best antidote for the malarial poison most violent in those localities, and there is nothing more effective in controlling the congestive fevers of the western plains and mountains than the wild sage which grows in such abundance in those localities. Thus good and evil, life and death, flourish side by side, the one furnishing an antidote to the other.

It is a well-known fact that with all poisonous reptiles the poison sack is at the root of the fang or the sting, and is injected through it into the flesh. It is not generally known, however, that the entrails of the scorpion contain the antidote of its own venom, relief being instantly obtained and all danger removed by crushing the body and applying it to the bite. In the scorpion the poison is contained in the last section of the tail, next to the dart at the extreme end of the tail, which inflicts the sting, and, like the fang of the serpent, carries the poison from the poison sack into

the inflicted wound. Remove this and the scorpion is harmless, the same as with the serpent when the fang is removed. The venom of the scorpion injected through its sting, however small the quantity, induces fever and paralysis of the tongue, and, like the poison of the cobra, lachesis, and crotalus, has been used to a certain extent as a remedial agent. It has been said, but we cannot vouch for the truth, that the scorpion commits suicide when surrounded by fire. It is a well-attested fact, however, that the brood of the mother scorpion, when they are large enough, cling to the mother like leeches, devouring her life atom by atom. When there is nothing left but the shell, they scampor away.

The so-called rabies mephitica, which is hydrophobia from the bite of a common skunk, finds its natural antidote in its defensive fluid, which it squirts with great force, sometimes to the distance of eight or ten feet. This fluid is not the urine, but is secreted by two glands, one on each side the anus, called anal glands, and is the mephitic battery for offense and defense. Until the fluid in the battery is discharged the skunk seldom bites, so that there may be a causative connection between the inactivity of the anal glands and the generation of a malignant virus in the glands of the mouth, the former being the antidote to the latter. The bite of the rabid dog is supposed always to convey the poison, but the skunk only bites when the mephitic battery is exhausted, and the bite produces hydrophobia. The virus in hydrophobia affects the eighth pair of cranial nerves and their branches producing difficulty of swallowing and breathing. The symptoms are more violent and more likely to be fatal in rabies canina than in rabies mephitica, but the period of incubation is about the same in both. It is an interesting fact that man has never been known to inoculate man with this disease.

It is along this line of study, directed to a certain extent and stimulated by these hints from nature's effective work, that the bacteriologist has attained the most satisfactory results in the etiology, prevention and cure of diseases hitherto considered the most malignant and pestilential. Fully realizing the fact that the diagnosis and treatment, prevention and cure of the latest and most malignant pestilence, "the bubonic plague," rests almost entirely upon the results of bacteriological investigation, the Board of Health of this city are taking steps towards the erection on the grounds of the Reception Hospital in East Sixteenth street of a bacteriology laboratory, which will cost about twenty-five thousand dollars.

On account of the virulent nature of the bubonic germs, it will be constructed with the utmost care, and every precaution taken to safeguard the workers in the laboratory. Dr. Doty, the efficient Health Officer, thinks with the precautions now being taken there is no danger of the disease gaining an entrance into the city, but as two cases have been treated at the quarantine during the past year, and New York is in close commercial relation with every part of the world, the prudence and forethought of the Board of Health is to be commended in taking active steps to meet every condition which may arise. In a recent editorial we stated, on the authority of a prominent physician who has traveled extensively in South America, that a disease closely resembling in all particulars the bubonic plague, and, he thought, identical with it, existed among the natives of the pestilential swamps of the headwaters of the Brazilian rivers.

The natives live mostly on fish and game, and their huts were filthy in the extreme. In their treatment the poison of the plague was met by the poison of the serpent, the most efficient remedy being scarification with the fang of the Crotalus, lachesis or some other poisonous reptile, to which the poison sack was still attached. The fact should not be forgotten in the bacteriological investigation of this disease that serpent poison—the crotalus, the cobra, and the lachesis—are included in the repertory of remedial agents in diseases characterized by great depression of nerve force and active general decomposition of tissues. In the opinion of the physician quoted, the recent appearance of the plague in Uruguay came from the locations above mentioned. The city where it made its appearance is located several hundred miles from the seaboard. If it came from that direction the disease should have first shown itself at the entrance port. For this reason he thinks it was conveyed by wandering Indians from the interior.

The earnest study now being given to this and other diseases from a bacteriological standpoint gives promise of great success

Vacation Hygiene.

The Medical News says that more than one-fourth of the population of our American cities, during the heated term, find their way for longer or shorter periods to the country. Some of them, in their search for health, meet with dangers from disease that they would not encounter at their city homes. It is not unusual for the family physician to be called to treat cases

of infectious disease occurring after a vacation that would not have developed under ordinary circumstances in town.

When the exodus to the country was shared by only a very small percentage of our city population those who went enjoyed all the benefits of country life and suffered very few of its disadvantages. Now that the annual outpouring of city-folk is so large dangers from disease that surpass those of the city need to be carefully guarded against. And so it devolves upon the family physician to give such counsel in the matter as will make the status of modern sanitary conditions clear to those among his clients who seek recreation and health away from home.

Probably the most omnipotent danger to health in the country comes from the drainage. Means for the removal of waste material that are ample in winter, and that keep a little community in excellent health, may prove totally inadequate during hot weather, especially with an influx of visitors that perhaps doubles the population. This is a matter that is often not investigated at all when the selection of a country stopping-place for the summer is under consideration. Cesspits that served very well to retain sewage during winter may with increased use prove ready contaminators of a water-supply even at a considerable distance. This contaminated water, even when no specific disease exists, maintains a constant state of hyperemic irritability of the intestines which predisposes, should the slightest occasion occur, to the successful implantation of typhoid fever infection. Nearly every autumn city-folk have some family among their friends to condole with because of a death from typhoid contracted in this way.

In addition to the drainage and the water-supply there remains the question of the food. It is sometimes the custom to assume that because people are residing in the country their food is necessarily always fresh. This was true in the idyllic days before all the city world fell to country-summering. The use of canned goods, has, however, so permeated every stratum of modern life, that Corydon and Thyrsis in their Arcadian home would, in our day, surely use somebody's "best" brand of all sorts of preserves. With Arcadian simplicity, they would undoubtedly let them stand open from meal to meal and consider that if they had been preserved for a year, they certainly would not spoil in a few hours. Mistakes like this are the source of many an acute gastritis or more lasting dysentery and only the most careful precautions against

involuntary errors on the part of well-meaning hostesses will prevent them.

Milk, because of its significance for the children to whom it is so imported, must receive special attention. In this matter it is a mistake to assume that country-supplies *must* be good. For the preservation of milk ice is absolutely necessary and is also effective. But ice is apt to be sadly deficient in the country. New York's milk-supply is gathered from a distance that necessitates its distribution on the average twelve hours after milking. Berlin derives its milk-supply from sources that require only six hours for its delivery. The average bacterial contents of the New York milk is considerably lower, however, than that of Berlin, because the milk is at once put on ice in this country and kept constantly at a low temperature until its delivery. Low temperatures inhibit the growth of bacteria. It is not so much the original number of bacteria that get into milk that make it dangerous, as the number that result by reduplication in so favorable a culture medium if an inhibitory low temperature is not maintained.

In a word, the sanitary regulations that have during late years so greatly reduced the mortality of large cities have made the general hygienic conditions of city life better than those in the country. This is especially true for the times when an influx of visitors somewhat converts country conditions into those which obtain in the city. It is important, then, that prospective "summerers" should realize this and know definitely beforehand something of the surroundings to which they are to migrate.

For most of the summer resorts on the Continent European governments provide by law a board of health that assures the maintenance of proper sanitary conditions. In our country this, apparently, has not as yet been thought of and, owing to the nature of our National and State relations to public health, the establishment of uniform regulations would present serious difficulties. Family physicians must assume for the present, then, the duty of advising and warning in this important matter.

The Bacteriology of Slight Temperature Rise During the Puerperium.

Fever occurring in the puerperium is a matter of concern to the careful obstetrician, says *The Woman's Medical Journal*. The one-day fever is usually closely related to the character of the labor. It is not uncommon for the temperature of the patient to register 100 deg. F. or 100.5 deg. F. at the end of labor. If the labor has been

severe and prolonged the temperature may register 101 deg. F. or more, with a corresponding increase in the pulse rate. The duration of this temperature-rise depends also on the time of day when labor is completed and upon the powers of endurance possessed by the patient. If the first stage has been tedious and prolonged so as to deprive the patient of a night's rest, the second stage severe and painful with perhaps late forceps delivery a temperature of $1\frac{1}{2}$ to 2 degrees is to be expected and especially so if the woman has been delicately reared.

Physically and morally she undergoes expenditure of energy for which she is not fully capable. Labor of ordinary severity completed in the morning or first half of the day, may be followed by a temperature rise lasting twenty-four hours or until the patient has had a night's rest. If the labor is completed late in the afternoon or early evening the patient rests at night as she cannot during the day. The temperature and pulse will be normal the following morning and will continue so if there is no infection—a duration of fever of not more than twelve or fifteen hours. Again, after the more exhausting labor, the temperature may register 99 deg. in the morning following labor and 100 deg. in the evening, falling to normal during the second night of rest. But, as a rule, a temperature rise lasting more than 24 hours after labor must be regarded with suspicion. That a second or third day fever following a delivery with normal temperature is due to some form of infection, there can be no doubt. This has been long conceded clinically. Bacteriological investigation has found pathogenic germs within the cavity of the puerperal uterus, where the fever occurring lasts three or four days. A one-day fever (eintagsieber of Brumm) on or after the third day is not common. Rise of temperature occurring at this time will last from three or four days or more in mild cases and to as many weeks in severe types. "Mild cases" are more frequently met with than those of a severe type. Their frequency, as stated by Ahlfeld, "increases in proportion to the care with which the physician takes the temperature." In the absence of such care many cases are overlooked. A quickened and irregular pulse, persisting fifteen to twenty-four hours after delivery, though the temperature is normal, may be considered the fore-runner of a temperature elevation on the third or fourth day and which will continue for varying length of time and severity. The true etiology of slight temperature elevation in the puerperium is not yet proven. Several in-

vestigators have made a study of the subject without arriving at any conclusions. The most recent work done in this line is that of Dr. K. Franz of Halle University, reported in the *Centralblatt für Geburtshilfe und Gynäkologie* and which appears translated in abstract in *Obstetrics* for May.

The toxicity of the bacteria taken from the uterine cavity in mild cases of temperature elevations must be proven or disproved by experiment upon the lower animals and the presence or absence of bacteria in the uterine cavity where there is no elevation of temperature must be ascertained and if found, their toxic or non-toxic powers tested, before the question of etiology is positively settled.

The Relations Between Influenza and Chronic Disease of the Heart.

The Medical Record says that an abundant experience has shown that the poison of influenza, among other evil effects, is capable of exerting a profoundly deleterious influence upon the circulatory apparatus. It is known that especially the aged and the debilitated are prone to fall victims and to succumb to the disease, and this result, it may be readily surmised, is principally attributable to influences acting upon the heart. An interesting discussion of the cardiac complications of influenza is entered upon by Schott (*Berliner klinische Wochenschrift*, 1900, Nos. 21 and 22), who points out that several groups of cardiac lesions in the course of influenza may be distinguished: (1) those due directly to influenza, (a) during the febrile course, (b) during a relapse; (2) those occurring as sequelæ; (3) those due indirectly to influenza, through disease of other organs.

Influenza gives rise most frequently to cardiac neuroses, both motor and sensory. These are generally attributable to the action of toxins, and although this is probably the correct explanation, it has not been determined with absolute certainty. Abnormally increased frequency of pulse is often attended with diminution in arterial pressure, with dicrotism, and with arrhythmia and allorhythmia. The frequency of pulse often bears no relation to the temperature, being disproportionately greater than in other febrile diseases. Bradycardia occurs with unusual frequency in the sequence of influenza, but likewise in association with irregularity and inequality of the pulse, although less commonly with dicrotism, while lowered arterial pressure is not rare. There may further be alternation between tachycardia and bradycardia, some-

times in consequence of exciting influences, such as excessive physical activity, emotional disturbances, overloading of the stomach, and the use of alcohol, coffee, or tea; but at other times it may develop suddenly without obvious cause. These uncomplicated cardiac neuroses are by no means always free from danger, but they may be associated with weakness of the myocardium and dilatation of the heart. As long as the patient remains at rest the heart may exhibit no deviation from the normal on auscultation or percussion, but on slight physical exertion the conditions are changed, and one or both ventricles may become dilated, and the first sound at the apex may occasionally be dull or impure on auscultation. Such a condition may persist for a long time.

The sensory neuroses occur less frequently than the motor in association with influenza, although even they are quite common. Little is known of vasomotor cardiac neuroses. Cardiac pain, in the form of pseudo-angina, as well as true angina, is, however, not infrequent. A neurasthenic condition of the heart is common. As already stated, the toxins of influenza may exert a directly injurious influence upon the heart muscle, and thus readily bring about conditions of exhaustion and relaxation, and thereby frequently myocardial weakness, especially as a result of carelessness, as from getting up prematurely, and exposure to cold and wet. Such conditions, unattended with further complications, may either disappear spontaneously, or yield speedily to appropriate treatment. With an unsuitable mode of life, however, permanent injury may result, with dilatation and all of its deleterious effects, and even fatty and parenchymatous degeneration of the myocardium may occur. The dilatation may give rise to relative insufficiency of the mitral valve, with a systolic murmur at the apex, and possibly, also, to relative aortic insufficiency. Influenza, further, may be attended with acute dilatation of the heart, and sudden death may follow.

Valvular disease of the heart, in consequence of primary endocarditis due to influenza, has been recorded by numerous observers, but it is more common as a result of disease of the pericardium, the pleura, the lungs, or a complication of acute rheumatism. Disease of the myocardium is even a more frequent result from this cause. Old persons, and especially those presenting advanced arteriosclerosis, are exposed to especial danger in this connection, and a large proportion of deaths from influenza occur in such individuals. Other

disturbances in the pulmonary circulation, such as may be induced by influenza, embarrass the action of the heart in part in a purely mechanical manner, and in part through chemical influences, such as accumulation of carbon dioxide in the blood. Those suffering from universal adiposis are predisposed to such disease of the heart, even in the absence of any trace of fat heart or of vascular alteration. Influenza may convert a mild variety of glycosuria into one of moderate severity, and it may render latent mellituria active, and thus affect the heart. Influenzal changes in the heart occur with relative frequency in cases of gout. The gastro-intestinal disturbances of influenza may induce enfeeblement of the myocardium in two ways—namely, through the resultant anæmia, and through distention of the intestinal tract, with more or less marked flatulence and displacement of the diaphragm upward. It is not definitely known, although it is possible, that the toxins of influenza exert a directly injurious influence upon the state of the blood.

Influenza most readily, and most rapidly, attacks a heart already diseased, altered, enfeebled, or irritated. The danger consists, not only in derangement of compensation, but also in renewal of the endocarditic process. Patients with congenital valvular disease, or congenital deficiency of the inter-ventricular septum, are often destroyed within a short time, or present marked derangement of compensation. In the presence of myocarditis of arteriosclerotic origin, compensatory derangement and anginal attacks of marked severity occur in conjunction with more or less rapidly progressive inflammatory process. Fat heart may be readily converted into fatty degeneration, and the enfeeblement may be marked. Attacks of syncope of longer or shorter duration may also occur, and thrombotic or embolic vascular occlusion may result. Not only are previously existing cardiac neuroses readily regenerated or aggravated by an attack of influenza, but the toxins also impair the muscular activity of the heart, and dilatation consequently results. The latter may, however, be due to other causes, such as insufficiency of nutrition during or immediately following the febrile influenzal period, especially in consequence of too exclusive a milk diet, and also after excessive doses of antipyrin, abnormally large doses of alcohol given with especial frequency, and over-irritation of the heart. Under such circumstances the state of relaxation is all the more marked. The debilitated conditions of the heart involve sometimes the right and sometimes the left ventricle, and sometimes both. The

aggravations in the conditions of the heart induced by influenza are almost unexceptionally attended with lowering of the blood pressure.

To Limit Dispensary Abuse.

From present indications, as seen by those who are connected with public dispensaries, the act passed by the New York Legislature to prevent the abuse of the privileges offered by dispensaries has as yet produced no marked results, says *The Medical News*. Men and women still go to the dispensaries, demand free treatment, and unblushingly deny their ability to pay even a small fee while admitting an income perhaps of from \$8 to \$25 per week! Policemen, letter-carriers, street-railway employes, all in uniform, come and demand free treatment, as well as the well-dressed woman who is seen to remove a handful of diamond rings from her fingers while sitting in the outside waiting-room. The police, letter-carriers and street-railway employes have all their own society or corporation physicians, but as would-be patients at a dispensary, they "don't like the company doctor."

There is no diminution in the number of applicants for medical charity, nor is there apt to be as long as any dispensary has to show a large number of non-paying patients treated as a reason for its existence or in order to secure its share of public charity funds. The real harm done by free institutions is not that a few mendacious, mean, well-to-do impostors get free treatment, but that the whole wage-earning class of the community is gradually being taught that medical attendance is something they should receive for nothing and that there is no cause for shame when they pauperize themselves by begging for it.

There lies before us as we write a circular letter, entitled "A Practical, Effective and Humane Method for Limiting Dispensary Abuse." The writer gives his experience in what he calls a new method of meeting the dispensary evil and asks the cooperation of such physicians as approve of his method in extending the work. For two years the writer of this letter conducted in New York City a free eye dispensary at an annual expense to himself of \$2,000. During the last year of that time 1,715 patients applied for free treatment. About 10 per cent. of this number were proper dispensary patients. About 3 per cent. were refused treatment, as they were plainly people who should have been ashamed to ask for it. The remaining 87 per cent. consisted of wage-earners whose average income was from \$8 to \$25 per week. They

were mechanics of all sorts, book-keepers, stenographers, domestics, dress-makers, city employes, letter-carriers, clerks, salesmen, widows and unmarried women living on small but sufficient incomes. The 10 per cent. pauper element of the patients was probably benefitted by this charity. The 87 per cent. of the patients, who were neither paupers nor millionaires, surely had their independence and self-respect undermined by the alms-receiving, and received more damage than if they had paid a moderate fee, even if it necessitated some self-sacrifice and economy. The writer feels sure that this class of people dislike at first to go to a charitable institution and would prefer to pay a moderate fee if they knew where such a fee would be charged.

At the end of two years the free dispensary was discontinued and an eye, ear, nose and throat "sanatorium" opened in its place. A conspicuous sign was placed at the entrance stating that the sanatorium was a non-charitable institution and that a reasonable and moderate charge would be made for examination and treatment. The writer states that during the year 1,555 eye patients alone received treatment there and paid a reasonable and moderate fee. These patients were of the class as those who formerly made up the majority (the 87 per cent.) and in many cases were the same individuals, and they gladly paid from fifty cents to two dollars for examination and one to five dollars per week for treatment. These patients paid the writer nearly \$3,500 during the year, which he considers better for him and also for them than free treatment. The greatest gain, he thinks, consists in the fact that over 1,500 patients, all of whom would have degenerated into dispensary paupers, are still untainted by alms-receiving. The above figures do not include patients of that class who require no special consideration as regards the fees charged.

The writer believes his experience proves that the wage-earners who are now being treated free at nearly all the larger hospitals and dispensaries would gladly pay fees if there were places where they could go and pay according to their income without too great a sacrifice. As a remedy for the dispensary evil he suggests that such places be established where this class of people can go and pay what they can, and that such payment be insisted upon. Sanatoria for the rich are many and it is not considered unethical for them to let their existence be known, therefore the writer concludes that it can be no more unethical for sanatoria where the prices are adapted to the incomes

of nine-tenths of the population to let themselves be known.

The experience of this physician seems to show that a majority of the wage-earners who apply for free treatment at dispensaries would be willing to pay a small fee. If this is so and places were established where treatment could be obtained for low fees, it might lessen the number of *new* patients of this class at free dispensaries, but would it diminish the attendance of the many thousands who have been for a long time, and are still, receiving free treatment? There are many physicians now giving their services for nothing in free dispensaries who surely would be glad of an income of \$3,500, even if made up of fees ranging from fifty cents to \$2. We know nothing of this physician who thus obtains an income of \$3,500 from people who would otherwise be free dispensary patients, but the scheme is a good business proposition and saves many from the demoralizing effect of alms-receiving.

The World's Resources for Medical Supplies.

According to Merck's Archives there has, from time to time, been a good deal of speculation concerning what we shall do for fuel when the coal supply of Pennsylvania and other coal-producing regions gives out. No one has stopped to ask what we shall do for medicine when our present resources fail us. This is because we all see that the matter of supply in this class of goods is under our direct control. Few, however, realize the vastness of the opportunities which nature has laid before us or how little we are doing toward seeking the best at our command. It is a common thing for druggists to say that the best is none too good for the sick, but how many of us know on every occasion what the best is or whether it is really at our command when we want it? In the supply of drugs contained in the best stocked establishment of the world the number of articles is but an infinitesimal fraction of the number nature holds in store for us. "Prove all things and hold fast that which is good" is an admonition which the wise doctor keeps in view, but how can he test or try drugs that have not yet been discovered or even suspected to exist. We extol quinine in malaria, morphine in pain, mercury in syphilis, ichthyol in erysipelas, and aconite in fever. How do we know that there are not remedies awaiting a discoverer that will as far surpass these as these surpass the crude remedies of the South Sea Islanders? Sir Isaac Newton is

reported to have once stated that he felt, in all his searches after truth, like a child gathering pebbles by the sea shore. Every once in a while one more beautiful than the last was discovered, while the whole ocean of truth lay all unexplored before him. It is even thus as regards our possible supplies of drugs. All that research has yet given us are the merest, minutest of fractions of the whole. Our chemists and pharmacists have done very little toward the study of our indigenous drugs. We have found out that the most potent of remedies in any given class are more likely to turn up in a tropical than in a temperate region. This of course is not true in all cases, as can be seen in digitalis, aconite and belladonna. It is, however, distinctly seen in Papaver and Cannabis. But whether we look to hot climates or cold ones we discover that the great forests of the earth have not yet been explored nor the great pampas searched for potent drug-producing plants as they should be. The wilds of Africo, of South America, of Borneo, of Celebes, of Sumatra, of the Philippine Islands, all contain untold multitudes of plants the hidden virtues of which the scientific seer has not deigned to even look at. The few we know have come to us by mere accident or by the recommendation of savages or missionaries who have tried them. If in the little bit of botanic territory which we have cultivated so much has been discovered, how much more is it fair to assume the million-fold greater territory should on the same proportion contain. Genera and species in vast numbers still remain unknown. Their alkaloids, glucosides, neutral principles, gums, resins, acids, ethers, oils, toxalbumins, and ferments are all mysterious quantities that await exploration. Who is at work upon them? Where is our new Dragendorff ready to open up the Twentieth Century with a continuation of the splendid work begun by the illustrious Russian? How much systematic work is being prosecuted at present in this magnificent field of research? If we turn to the sea, there too we find unexplored depths and breadths in its unknown flora. Nothing is being done with it and no one seems to think that anything should be done with it other than letting it alone. A few years ago one or more pharmaceutical firms did splendid work in exploiting the tropics for new organic remedies, and from their depths did bring some really valuable contributions. Why have they ceased their labor of love in behalf of humanity? For some reason there is a dark shadow hanging over scientific materia medica in all the old fields of work. In synthetic chemistry much is being done,

but even this is threatened, as can be seen by any one who carefully notes the attitude of the medical profession toward it. If we carefully scan medical literature for some evidence of interest in the progress of *materia medica* we will find it written all over with "*mene tekel*." It looks almost as if a conspiracy of silence had been involved among medical journals against this department of medical science. Of course it is absurd to assume the possible truthfulness of such a hypothesis as this, for nothing of the kind would for a moment be tolerated by the profession at large. The cause lies deeper, and when found will probably show itself as due to some undeveloped trait of average human nature. If we could question those who have introduced the really new and valuable things of the past forty years they could, if willing, no doubt enlighten us as to the secret of the paucity of encouragement bestowed upon researches along the lines we have indicated. Such knowledge can only be obtained experimentally and unless the proper experiments are being performed in order to make such discoveries the medical press cannot supply the same. Work must be done or *materia medica* and therapeutics must languish. The surface only has been searched and all the stray facts that lie on or near the surface are in our profession. To make discoveries of permanent value now requires trained men skilled in chemistry, botany and physiology. What encouragement are we holding forth to such men that is sufficiently strong to draw them from other lines of business into this? To practice medicine, prosecute such studies and do such work, all at the same time is absolutely impossible. To do such work for mere glory or from a sense of duty is to starve and die. Men cannot be sent into the wilds of South Africa, as Dr. Rusby was sent there, unless provision is made for their maintenance. If they return with articles of possible value the testing of these, their manufacture, their distribution and the dissemination of knowledge concerning them cannot be accomplished by a mere wish. Can we hope to do anything in such work unless we are willing to fully compensate the exploiters of this branch of science in a most liberal manner? Every effort at increasing the cost of such exploitation and every effort at discouraging remuneration is a stab at medical science.

Congestion.

Congestion, or hyperemia, is a condition so often encountered by every physician in his daily practice, and frequently so ob-

scure and variable in its manifestations, that it has become an interesting subject of study, says the St. Louis Medical Era. Its importance to the physician is due not only to its frequent association with a multitude of diseases and morbid conditions, but to its determining influence on their results. Its gravity as an intercurrent or concurrent phenomenon in pathology, unfortunately is often overlooked.

The definition of congestion is simple enough—an excess of blood in the vessels of a part with a diminished movement of that blood. The heart moves the blood and the arteries distribute it. The veins return it to the heart, but not directly. Interposed between these distributing and returning channels are the capillaries, which serve as mediators to the arterial and venous currents. In active congestion the *arteries* are principally concerned; in passive congestion; the *capillaries*, and in mechanical congestion, the *veins*.

There is always more or less danger associated with congestion, especially when vital organs are involved. It is the initial process of many diseases and morbid conditions, of which inflammation is a common termination, and it is not always easy to determine when congestion ends and inflammation begins. In a general way congestion is a functional disturbance, and inflammation an organic change. Therein lies the difference. But the functional derangement of congestion, if prolonged, may become an organic disorder; and inflammation, if promptly arrested, may entirely disappear or subside into a functional disturbance. The two are thus intimately related. In active congestion there is an increased flow of arterial blood; with an increased temperature of the part. In passive congestion there is a slowing of the blood current and at times a stagnation of venous blood, with a lowering of temperature in the parts involved.

The chief causes of congestion are venous obstruction and atony of the capillaries and veins. A cord around the arm causes a congestion and swelling of parts below the constricted point. This is venous obstruction. In like manner congestions occur in the internal organs when the veins leading from them are compressed from any cause. Valvular disease of the heart which impedes the progress of the blood through this organ will cause congestion of the pulmonary veins and capillaries, and also the veins and capillaries of the systemic circulation. Obstruction to the transit of blood through the liver will cause congestion of the abdominal organs, hemorrhoids, etc. Congestion from atony of the vessels is due

to a variety of causes, such as debility from malnutrition, adynamic fevers, etc. In these cases the weakened vessels dilate to accommodate the increased volume of blood. Such congestions are apt to become chronic, and are responsible for many of the aches and pains of persons in feeble health. Cold, by constricting the vessels of the surface and extremities, diverts a considerable volume of blood from these parts to the internal organs, which gives rise to a variety of internal congestions, often terminating in inflammations. Malarial and exanthematous fevers in some mysterious way bring about similar results. The congestions induced by these febrile conditions very often lead to the inflammatory complications which endanger life. The effects of congestions on the organs may be insignificant or grave, according to their nature and duration. Congestion generally impairs the vital properties of organs through an undue distention of their textures, lowering both sensibility and contractility. Secretions are generally diminished and nearly always perverted.

In congestion of the conjunctiva and Schneiderian membrane the secretion is augmented, but in congestion of the liver, kidneys and bronchi, the reverse, as a rule, is true. Occasionally congestion leads to an augmented transudation from the distended capillaries, ending in effusions of the watery and saline portions of the blood more or less charged with albumen and fibrin, as witnessed in the fluids of fluxes and dropsies. The distention of the engorged capillaries is sometimes relieved by a general exhalation of their watery contents. Thus congestion of the bronchi sometimes ends with bronchorrhœa, congestion of the bowels with diarrhœa, congestion of the uterus with leucorrhœa, congestion of the kidneys with a profuse discharge of albuminous urine, congestion of the lungs and pleura with hydrothorax, congestion of the heart with hydropericardium, and congestion of the abdomen with ascites.

Another condition which favors such terminations of congestion is a watery state of the blood. When the blood is poor, transudation takes place even without much distention of the vessels. Congestion, when continued indefinitely, causes alteration in the structures of organs. Hypertrophy is a common sequel of chronic congestion. Bright's disease of the kidneys, granular degeneration of the kidneys and cirrhosis of the liver find their starting-point in congestion.

The first and most important step in the treatment of congestion is the removal of the cause. The sooner this is done the

sooner comes restoration of health. The removal of the pressure from blood vessels controlling and regulating inefficient action of the heart, and promoting secretions will tend to diminish congestions resulting from the various venous obstructions. In congestion from atony of the capillaries, attack the causes which produced the atony. Where gravitation is a factor a change of posture will bring relief. The properly adjusted pressure of a bandage will give at times a needed support to weak vessels and promote their contraction. Friction and massage often act like magic in reducing a congested organ. Passive exercise in many cases will be found useful. Contractility and tone may be restored to weak vessels often by cold applications and astringents in conjunction with a nutritious diet and wisely selected tonics. Stimulants may be needed. In plethoric cases depletion may be required. Blood-letting and purgation will, when properly employed, often unload overdistended vessels. Congestion of the liver may be aggravated by the administration of mercury, if other derivants have not been previously employed; whereas with saline aperients preceding the administration of mercury, the mercury stimulates the secretion of the liver and reduces the remaining congestion. The same may be said of congestion of the kidneys. This form of congestion is increased rather than diminished by diuretics unless relief has first been obtained by the employment of purgatives and diaphoretics, after which diuretics will cause a free flow of the urine. Successful treatment of this as well as most other diseases depends upon the timely and judicious use of proper remedies.

MISCELLANEOUS.

Treatment of Myeloid Sarcoma of the Scapula.

(Revue de Chirurgie, Paris, April, 1900.)

The only treatment that is likely to be of any avail in sarcoma of the scapula is the entire removal of the bone, but this does not necessarily mean that there will be great or any loss of function of the upper extremity. L. Picque and Dartigues record a case of this kind. The patient was a young woman, from whom the whole of the scapula was removed for myeloid sarcoma, the head of the humerus being luxated and the outer third of the clavicle also excised. The head of the humerus was after the removal of the scapula fixed somewhat backward. The result was perfect, save for a slight lowering of the shoulder, which was re-

moved by the application of a brace. The patient, when seen a year after the operation, was able to perform her duties in a manner that was equal to that before the excision.—*Treatment.*]

Diffuse Amyotrophy Following Slight Traumatism.

G. Ballet and Henry Bernard, in the Archives Generales de Medecine for May, 1900, describes six cases of diffuse muscular atrophy following slight injuries to the extremities. The clinical study of these cases leads them to the conclusion that there is a special form of muscular atrophy which follows superficial lesions of the skin, and exceptionally those of the joints. This atrophy affects all the muscles of the extremity, usually does not reach a great degree, amounting to only three or four centimeters in the circumference of the extremity, and is not accompanied by a reaction of degeneration. This syndrome is not to be confounded with an ascending neuritis or a degeneration of the axis cylinders, and is probably associated with changes in the ganglion cells of the anterior horn.—*Medicine.*

The "Profiteess" of Christian Science.

The miracle-working "she" of the present day, the "profiteess" of "Christian Science," has made an exhibition of herself at a local fair at Concord, N. H., sharing the attention of the public with a high diver. This is supposed to put at rest the suspicions ventured by some that "mortal mind" had got the best of her to the extent that decomposition had set in, as it has with so many of her believers. This fact was sent, with details of her procession around the race course escorted by the marshals of the fair, by special telegram, to the Chicago Times-Herald for the satisfaction of her western devotees. The alleged reason of the "profiteess" emergence was her human but unsanctified interest in seeing the diver jump from a height of eighty feet into five feet of water, with the chance of breaking his neck.—*Journal A. M. A.*

It is rumored that the mother of "Christian Science" lately availed herself of the services of a dentist, and that while she was in the dentist's chair she exclaimed "Ouch!" Her disciples may interpret that exclamation as one of triumph at the demonstration that she felt no pain.—*N. Y. Med. Jour.*

Intra-abdominal Operation for Retroverted Uteri.

G. W. Kaan when operating for this trouble picks up the round ligament and peritoneum together with a double hook, about midway between the cornu of the uterus and the internal abdominal ring; then passes a suture of silk subperitoneally from the uterus as far outward along the round ligament as seems necessary. The tissue is puckered along this suture, the two ends of which are then tied together with moderate traction. To avoid its cutting through, the silk used is of medium size, and is passed into the tissue of the fundus at its point of entrance and through ligamentous tissue at its exit. The strain on this stitch, however, is not nearly so great as upon the stitches of a ventral suspension, which drags the uterus out of position.—*American Journal of Obstetrics.*

There is a new doctor in a little town over in Iowa. It is so small a town that even its name is not to be found on the map—but it has other attractions. The doctor has brought with him from Chicago a rare assortment of "honors," which are exhibited in the local papers as follows:

"He was some years ago head analytical and manufacturing chemist for Drake Brothers Company of Milwaukee, Wis., and same for Peter Van Schaack & Sons, wholesale importing and manufacturing drug house of Chicago; has practiced medicine in Chicago for some years, was attending physician at Cook County (or Chicago City) hospital, where 50,000 patients are treated annually, and has had some years' experience in clinical training in the great medical and surgical clinics of Chicago; is a member of American Medical, Mississippi Valley Medical and Illinois State Medical Associations, American Pharmaceutical and Illinois State Pharmaceutical Associations and American Chemical Association (or Association of American Chemists). Registered pharmacist in Illinois and Wisconsin. Graduate department of chemistry and pharmacy University of Illinois, Chicago School of Anatomy and Physiology, department medicine and science University of Chicago and Jenner Medical College, demonstrator of anatomy Jenner College."

His fellow-citizens are to be congratulated upon the acquisition of such a rara and are exhorted to live up to the honor. Doubtless in reciting the list of these multiplied titular decorations they will wonder how "one small head can hold all he knew."—*Medical Standard.*

The Therapeutic Value of Urotropin.*

By Dr. Emily Suppan, of Vienna.

Since the time that Nicolaier first introduced Urotropin for the treatment of bacterial disease of the urinary tract and the uric acid diathesis, numerous reports have been made fully confirming the therapeutic value of the remedy. Entirely apart from its effect upon the uric acid diathesis, it is indubitably to Nicolaier that we are indebted for the possession of a remedy for a whole series of severe and even as a rule incurable affections of the urinary passages. It is of immeasurable value in practice to possess an agent for the relief of those severe forms of cystitis occurring in old men due to prostatic hypertrophy, and leading as a rule, to chronic pyelitis or pyelonephritis and all the symptoms of chronic urinary intoxication. They are justly feared by the practitioner. Urotropin is so far the only remedy that we possess by means of which vesical catarrh and its complications can be treated internally. It is of the very greatest value as an aid to the local treatment, and in many cases can replace it entirely.

The physician treating severe cases of urosepsis will be quite familiar with the difficulty of deciding upon the management of these cases of cystopyelitis in old and often greatly debilitated, even marantic men. Is lavage of the bladder to be undertaken or not? To him Urotropin will be extremely welcome and very useful. The malady is frequently fatal, and the use of the catheter only postpones its termination. Often there is absolutely no better method of handling these cases than to administer quinin to combat the fever, give Urotropin for the urinary poisoning, and watch the case for a day or two. It was our former custom to catheterize at once, and wash out the bladder once, twice, or oftener daily; or in hopeless cases to institute permanent drainage of the bladder. In spite of this the mortality from uræmia, anuria, and hæmorrhage was very great. We can certainly spare the patient pain and discomfort, and perhaps help and save him by avoiding catheterization and employing Urotropin. In these severe cases instrumentation should only be used from time to time for the evacuation of the bladder when the patient cannot do so spontaneously.

If the Urotropin is effective, and the patient survives, vesical lavage may be undertaken in a certain proportion of these cases in two or three days, the drug being mean-

while continued; thus instituting a combined local and general antibacterial treatment. And we should never neglect to administer Urotropin where absolute retention necessitates the use of the catheter, or where lavage is indicated and is not too risky. Hence we may lay down the rule:

Urotropin must always be employed in every case of urosepsis of the aged with prostatic hypertrophy, in all the non-acute and septic bladder and pelvic catarrhs which are the consequences and complications of this growth, as also in inflammatory conditions dependent upon atrophy of the prostate, neoplasms and diverticulæ of the bladder, and stricture. Omission to do so is a serious dereliction from duty, since by its means the fatal termination may be averted in many otherwise hopeless cases; and in others its continuous administration may so influence threatening symptoms that the patient may live even as long as twenty years thereafter without serious disturbance of his health. There is no possible doubt that Urotropin is of estimable value in the treatment of urinary poisoning in the aged. It is true that a certain number of these cases, even most hopeless ones, do improve spontaneously; but the percentage is small. It is indubitable also that some of them, more especially those seen late in the disease or in extremis, do go down hill in spite of the immediate administration of Urotropin in proper doses, and in spite of all other antipyretic and strengthening measures. But in a very large proportion of the cases Urotropin has an undoubted and decisive effect. Hence the injunction to begin the administration of the drug at once, and continue its employment for a long time, in every case of urinary fever in consequence of cystitis.

I have treated a very large number of prostatic hypertrophies during the last three years. Whenever a complicating cystitis of any severity appeared and whenever the symptoms of an ascending process or a beginning acute or subacute septic cystopyelonephritis showed themselves, I have never omitted to administer Urotropin at once in large doses. My favorable opinion of the drug is based on the very satisfactory therapeutic results that I have attained. It has done me brilliant service in some, and these not a small proportion of the cases; and I believe that I must ascribe the avoidance of rapidly lethal termination in more than one extremely critical case at least chiefly to the drug. Absolute proof of this, of course, is wanting. I do not propose to institute any control experiments, and let any case of mine with urinary poisoning go without

Rockbridge, Va., Alum Water.

That are of Intrinsic Value to the Medical Profession.

Extract from a paper read before the Atlanta Society of Medicine, April 26, 1887, by JOHN S. TODD, M. D., Professor Materia Medica and Therapeutics, Atlanta Medical College, Ga.: Ex-President of Georgia Medical Association; not read in our interest, but in the interest of Science and his profession:

"Some four and a half years since I had, among other cases, one of dysentery, which resist ing all medication, became chronic, and a LARGE ULCER OF THE RECTUM DEVELOPED. I called in consultation a noted surgeon. The patient's condition was one of extreme emaciation; blood and mucus in large quantities were voided about an average of once an hour. The dose of opium had been increased to 3 dr. laudanum in twenty-four hours and $\frac{1}{2}$ gr. morphine twice a day, and still matters grew worse. We decided to inject solution 30 grs. to oz. nit. silver in rectum. The result was a COLLAPSE that nearly proved FATAL. Upon it being suggested later that the operation be repeated, the patient, a young man, said if we and his family insisted, to avoid it HE WOULD COMMIT SUICIDE. Dr. W. S. Armstrong was then called in with me. He suggested an exclusively milk diet, gradual reduction of opium, and ROCKBRIDGE (VA.) IRON AND ALUM WATER. Immediate improvement set in, and in TEN DAYS so great was THE CONSTIPATION that oil and enemas had to be resorted to procure an evacuation from the bowels. Since that time I HAVE TREATED SEVERAL CASES EQUALLY AS BAD, WITH SAME HAPPY RESULT, using same diet and medicines, for of all agents for this disease, I consider THE ROCKBRIDGE ALUM AND IRON WATER THE FIRST. It is equally EFFICACIOUS in CHRONIC DIARRHOEA, AS MY RECORDS ATTEST."

DR. TODD, March 21, 1900, writes: I have for 16 years used these GRAND WATERS constantly in my practice with increased and increasing satisfaction, I inclose you article written 3 years ago on opium. "In chronic diarrhoea and dysentery, the milk diet, ROCKBRIDGE ALUM WATER, and small doses of opium given cautiously—very cautiously lest your patient acquire the opium habit—has proved so INVARIABLY SUCCESSFUL with me, that I have COME TO TREAT THESE CASES WITH $\varnothing$ CONFIDENCE BORN OF SUCCESS."

DR. HUNTER MCGUIRE, Virginia's great surgeon, says: As an astringent and tonic it is one of the most valuable I have ever used.

DR. S. GAILLARD THOMAS, Professor College of Physicians and Surgeons, N. C.: Most efficient astringent and tonic waters I have ever employed.

Write JAMES A. FRAZIER, Mgr. Receiver, Rockbridge Alum Springs, for Pamphlet.

the drug. The interests of the patient imperatively demand its immediate use.

To give a single example, let me mention a case that I treated some eight months ago: A very marantic patient, aged 72 years, had had for the last fifteen years frequent, almost hourly urination, especially at night. His color was faded, he was emaciated, and there was no appetite. His prostate was very large, especially the median lobe, which projected into the bladder; and there were deep recesses behind and at the sides of this protuberance in which the urine was constantly stagnant and undergoing decomposition. The bladder was hypertrophied and trabecular, and was never completely emptied, the residual urine being about 400 ccm. (13 ounces). The urine was purulent, and often stinking, and contained masses of mucus and pus. His fever frequently reached 39 degs. C. (102.2 degs. F.), and he was often kept to his bed with chills and diarrhoea. He had been having vesical irrigations for three weeks without the slightest effect. These I ordered to be stopped, after informing his relatives of the gravity of the outlook. I gave him 2 grams (30 grains) of Urotropin in $\frac{1}{2}$ gram ($7\frac{1}{2}$ grains) portions every four hours dissolved in half a glass of soda water. Even in four

days there was a slight improvement in the urine; there was less clotted mucus and pus, and the repulsive ammoniacal odor had diminished. The fever, general malaise, and prostration gradually disappeared. On the eighth day the patient was able to leave his bed, and the administration of nourishment, which had sunk to nothing, was in full swing again. Cautious lavage of the bladder with boric acid, and permanganate of potash with nitrate of silver could then begin. The Urotropin was continued in doses of 1.5 grams ($22\frac{1}{2}$ grains) daily. In the morning the bladder was thoroughly washed out with a large quantity of fluid; in the evening the patient removed the residual urine with a Nelaton catheter himself. Improvement was continuous for several weeks. But as soon as the patient stopped the Urotropin for several days the urine became worse; so that I directed him to take the drug for four days in each week. Thanks to the continued employment of the drug, and the careful nursing that he had, the patient was finally put in a very fair condition, though, of course, there was no question of curing his old vesical malady. About twenty other cases of septic cystitis and pyelitis in the aged ran a similar course under the same treatment.

I also treated seventeen cases of cystitis (ages ranging from 18 to 41 years), with Urotropin. They were usually gonorrhœal or a pure bacteria. In these milder cases I at first employed the Urotropin in doses of 0.5 gram ($7\frac{1}{2}$ grains) three or four times daily in half a glass of soda water only after the other remedies, solol or benzonate of soda internally or lavage after Didet and Janet, had failed me; later on I used it in the beginning to support the local treatment of the bladder, urethra, or prostate. Like many others, I found that local treatment was often useless, and in twelve cases I had to stop and rely upon the Urotropin alone. In the great majority of cases I had most excellent results. In some the urine became clear with surprising rapidity. In isolated cases there was no result, in spite of the use of the remedy for months; and I may call attention here to the fact that in very old and obstinate cases of bacteriuria or cystitis the dosage must be correspondingly large. Casper has remarked the fact that the result frequently depends upon the correctness of our judgment in this respect. I have results in some cases with 3 grams (45 grains) where 1.5 and 2 grams ($22\frac{1}{2}$ to 30 grains) were without effect. In every case, however, the patient's appetite was markedly increased; and the patient suffering from occasional chills, vomiting, and general disturbance lost these symptoms entirely.

The reason why Urotropin is inefficacious or why its effect becomes less after a time in certain cases has been explained by Casper and various other investigators. They found that in certain cases the Urotropin passed into the urine unchanged, and no formaldehyde could be demonstrated in the secretion. The action of the drug, according to Casper, depends upon the presence of free formaldehyde in the urine; the more there is of it, the more of the noxious microorganisms are destroyed. Only a portion of the Urotropin is split up; and severe cases of cystitis require large doses to get its effect.

There were no unpleasant by-effects in the vast majority of the cases to which I administered Urotropin. Some patients seem to have a certain idiosyncrasy for the drug, and had some headache or ringing of the ears. But these effects usually diminished when the drug was persisted in.

The diminution of the suppuration in the severe cystitis of the aged cannot be effected with any other method of internal or local treatment as it can by the use of Urotropin; no other remedy has the same bactericide and suppuration lessening effect. It will not do, however, to reject lavage and rely

upon Urotropin alone in every case. As many observers, and amongst them Nicolaier, Casper, Kelly, Smith, Brewer, Blech and Whittaker, have remarked, Urotropin is an excellent aid to lavage, in cystitis and pyelitis. In such cases the drug markedly improves the severest symptoms; cure, of course, cannot be hoped for.

I have seen an astonishingly rapid and permanent effect from the drug in seven cases of phosphaturia of the obstinate form which appears after long continued gonorrhœa, and in which no other therapeutic measure effected the slightest improvement. Under the use of 1 to 2 grams (15 to 30 grains) of Urotropin daily the milky urine cleared up, and the sediment of amorphous phosphates and phosphate of magnesia disappeared in a few days. There was prompt improvement also in the frequent urination, the urethral burning, the twitches and pains in the legs and loins, and the other numerous neurasthenic symptoms with which these patients were affected. Of course some cases of severe phosphaturia progressed more slowly; but marked improvement was always manifested.

Urotropin is thus a very efficient remedy for the treatment of diseases of the urinary passages, being invaluable in certain forms; and there is no other drug in our armamentarium which will take its place.

Success of American Sprinters Accounted For.

An ambulance from Roosevelt Hospital dashed down Twenty-sixth Street at an unusual rate of speed even for a New York ambulance, and following it as a close second came the electric ambulance from St. Vincent Hospital. The cause of all this excitement was the approaching arrival of two babies who threatened to be born on the run, a boy and a girl. The boy won and announced his arrival one minute after reaching the receiving-room. Losing the race to the Roosevelt ambulance caused the birth of the little girl before the St. Vincent ambulance could back up at the receiving ward door. Both mothers and their babies are doing nicely.—*Medical News*.

Renal Colic

According to Osler, surgery should only be appealed to when the colics recur so frequently as to interfere with the occupation, or when some serious intercurrent trouble announces itself; for remember stone in the kidney is not inconsistent with a long life of great usefulness with a fair measure of health.

LISTERINE

The word Listerine assures to the Medical Profession a non-poisonous antiseptic of well proven efficacy; uniform and definite in preparation, and having a wide field of usefulness.

On account of its absolute safety, Listerine is well adapted to internal use and to the treatment of Catarrhal Conditions of the mucous surfaces.

LITERATURE DESCRIBING THE BEST METHODS FOR USING

Listerine in the Treatment of Diseases of the Respiratory System

WILL BE MAILED TO YOUR ADDRESS, UPON APPLICATION.

We beg to announce that, in addition to the 14 oz. bottle, in which Listerine is offered to the trade, the pharmacist can now supply a smaller package, containing 3 fluid ounces, which is put up for the convenience of practitioners who prefer, upon certain occasions, to prescribe articles of established merit in the Original Package, under the seal and guarantee of the manufacturer.

FOR DISEASES OF THE URIC ACID DIATHESIS:

Lambert's Lithiated Hydrangea

RENAL ALTERATIVE--ANTILITHIC.

The ascertained value of Hydrangea in Calculous Complaints and Abnormal Conditions of the Kidneys, through the earlier reports of Drs. Atlee, Horsley, Monkur, Butler and others, and the well-known utility of Lithia in diseases of the uric acid diathesis, at once justified the therapeutic claims of LAMBERT'S LITHIATED HYDRANGEA when first announced to the medical profession, whilst subsequent use and close clinical observation has caused it to be regarded by physicians generally as a very valuable Kidney Alterative and Antilithic agent in the treatment of

Urinary Calculus, Gout, Rheumatism, Cystitis, Diabetes, Hematuria, Bright's Disease, Albuminuria, and Vesical Irritations Generally.

Realizing that in many of the diseases in which LAMBERT'S LITHIATED HYDRANGEA has been found to possess great therapeutic value, it is of the highest importance that suitable diet be employed, we have had prepared for the convenience of physicians,

DIETETIC NOTES.

suggesting the articles of food to be allowed or prohibited in several of these diseases. A book of these Dietetic Notes, each note perforated and convenient for the physician to detach and distribute to patients, supplied upon request, together with literature fully descriptive of LAMBERT'S LITHIATED HYDRANGEA.

LAMBERT PHARMACAL CO., ST. LOUIS.

Hydatid Cyst in a Native Indian.

This appears to be among the first of a very few well-established cases of this disease in a native of India who never had left home, and is reported by W. J. Buchanan (*Lancet*, July 7, 1900). A native of Bhagalpur was sent to jail in August, 1896, whence he was removed to the hospital very shortly for fever and right-sided pain. On examination a large abscess-like tumor appeared in the right flank, without fluctuating area. Aspiration yielded a pint of fetid, thin, pus-like fluid. The abscess was then incised, irrigated and drained. Death ensued within a few days with high fever and prostration. At the autopsy the following gross lesions appeared. An enormous abscess cavity, extending from below the free border of the ribs to the vertebral column in the right lobe; a large echinococcus cyst of the diaphragmatic surface of the liver, in size like a baby's head, filled with daughter and granddaughter cysts and fluid. The diagnosis was confirmed by the discovery of hooklets in the pathological laboratory of the medical school at Calcutta. —*Medical News*.

Decreasing Birth-Rate in Europe.

New statistics demonstrate the fact that in all the countries of Europe, with the exception of Russia, the percentage of increase by births has been diminishing since 1891, the average decline being three per cent. The greatest difference is shown by England, where births have receded from 34 per cent. to 29.1 per cent. From 1871 to 1875 the increase by birth in Germany was 39.9 per cent., but in 1891-95 this had sunk to 36.3 per cent., and in the year 1897 it went down to 36 per cent. The general average from 1881 to 1885 was 36.8 per cent., but is now 36 per cent. More noteworthy is the decrease in Austria, where in the course of twenty-five years it has dropped from 39.5 per cent. to 37.4. In Belgium the percentage in 1871 was still 32.1, but in 1897 only 29; and in France the shrinkage in the same period was from 25.5 to 22.4. Next to Norway the most favorable data are reported from Switzerland. —*Medical News*.

"I prescribe Hagee's Cordial of Cod Liver Oil Compound as a palatable up-builder."

A. M. CARPENTER, M. D.,
Professor of the Principles and Practice of
Medicine and Clinical Medicine, Barnes'
Medical College, 3537 Lindell Avenue,
St. Louis.

Carcinoma of Alimentary Canal.

Boas reported that he had become convinced from his study of two hundred cases of this affection that the influence of heredity is much overrated. On the other hand, his belief in the noncontagious character of carcinoma has been rudely shaken by twenty-two observations on its occurrence in persons living together. He proclaimed the necessity of prophylactic measures, especially in regard to the dejecta of carcinomatous subjects, and articles they have used, dishes, toilet articles, etc. Meat-eaters predominate in his experience, but vegetarians are quite frequently affected. Alcoholic antecedents were noted in 40 per cent. of his observations. Traumatism, he adds, may unmistakably favor or arouse carcinoma of the alimentary canal, and likewise phthisis, diabetes, and syphilis. —*Journal A. M. A.*

Beer.

Although the production of this beverage is very carefully controlled by the authorities in many of the continental countries, especially in Germany and Switzerland, the adulteration is carried on to such an extent that its quality is not what it would be if the laws against its debasement could be rigidly enforced. Chemical analysis proves that, aside from malt, hops and water, some beer contains chicory, pine sprouts, camomile, henbane, wild cherries, poppy heads, guinea grains, boxwood, potash, vitriol of iron, alum, licorice solution of tartar, linseed and similar ingredients. These substances enable the manufacturers to produce beer cheaper, and some of them help to make it heavier, and more stimulating, and, from the large quantity consumed, it would seem that this is what some people demand; consequently the supply. —*Sanitarian*.

Mississippi Valley Medical Association.

Place of meeting, Put-in-Bay, Ohio, September 10, 11, 12, 1901.

Officers—President, A. H. Cordier, Kansas City, Mo.; Vice-Presidents, C. F. McGahan, Aiken, S. C., Chas. L. Minor, Asheville, N. C.; Secretary, Henry E. Tuley, Louisville, Ky.; Treasurer, Dudley S. Reynolds, Louisville, Ky.; Chairman of Committee of Arrangements, J. C. Culbertson, Cincinnati.

Honesty is the poorest policy in the world if you expect to be paid in dollars and cents.

IDOZEN—MERRELL.



IDOZEN—an iodine derivative of methyl salicylate (true oil of wintergreen) it has an agreeable odor, is non-irritant, and combines the antiseptic, discutient, alterative and absorbent qualities of iodoform without any of its characteristic disadvantages.

The iodine being liberated very slowly in the presence of heat and moisture, no toxic effects may be apprehended.

The density of Iodozen is less than that of iodoform, hence a given quantity will cover a larger surface; it is, therefore, more economical.

Iodozen is absorbed slowly and adheres to sores and mucous membranes for a considerable period, and in the meantime exerts a protective as well as antiseptic effect.

These qualities place Iodozen in the front rank of antiseptic applications in the treatment of aural, venereal, and cutaneous diseases, in minor surgery and catarrhal affections of the uterus and nasal mucous membranes.

Iodozen, when mixed with powdered boracic acid in the proportion of 5 to 10 per cent. and used by insufflation, is of value in post-nasal catarrh and ulcerated conditions of the throat, but in specific lesions it is advisable to apply Iodozen pure, in order to produce the necessary antiseptic impression.

A useful dusting powder for the chafing of infants is made by combining Iodozen 5 per cent. with powdered starch—in erysipelas, Iodozen may be advantageously applied to the inflamed surface undiluted.

Combined with vaseline or lanoline, Iodozen forms an ointment of general utility as a healing application, and for the relief of puritis ani and vulva, hemorrhoids, prostatic irritation and gonorrhœa, in which affection it may be used as an injection.

Additional therapeutic applications:

Acne Rosacea	Eczema of auditory canal	Prurigo
Atrophic Rhinitis	Excoriations	Suppurating lupus
Adenitis chronic	Enlarged Spleen	Suppurating buboes
Arthritis	Goitre	Scrofuloderma
Abrasions	Hemorrhoids	Sycosis
Abscesses	Impetigo	Sun-burn
Burns	Irritation of the skin	Septal ulceration,
Balanitis	Ozœna	syphilitic or traumatic
Catarrh	Otorrhœa	Tinea tonsurans
Carbuncle	Post-operative wounds	Ulcerated surfaces
Chancres	of nasal cavities	Urticaria
Chancroid	Pemphigus	Varicose ulcers
Eczema	Phagedœna	Wounds

IDOZEN is put up in one ounce vials,

IDOZEN OINTMENT is offered in one ounce collapsible tubes, and in screw top jars in quantities to suit.

Sold by Wholesale Druggists throughout the United States,

The Wm. S. Merrell Chemical Co.,

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96 Maiden Lane,
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LONDON, ENGLAND.

Worthy of Note.

The recent developments in experimental pathology and therapeutics shed a flood of light upon a well-established clinical fact, *i. e.*, that most cases of general debility associated with impoverishment of blood, tissue and nervous force are unbenefitted by the ordinarily employed tonics, iron, arsenic, strychnine, etc. Precise methods of investigation show that the essential feature of anæmia, nervous exhaustion and malnutrition is a failure on the part of Nature to rebuild tissue and force as fast as they are consumed by the physiologic functions. Iron, arsenic, strychnine, etc., can never bring about the process of metabolic equilibrium. What nature needs is help—help along the same lines by which she herself maintains the balance of waste and repair.

Gray's Glycerine Tonic Comp. is uniformly effective because it duplicates and reinforces Nature's methods. This remedy is primarily a stimulant to normal nutritive processes; it begins aright by coaxing atonic, functionless digestive organs to resume their normal work—enables them to digest and assimilate exactly what Nature needs—food for blood, tissue and nervous force. It is an invariably effective remedy in anæmia, nervous exhaustion and malnutrition from whatever cause.

Petroleum in the Treatment of Infantile Diarrhœa.

W. E. Fothergill, in conducting his clinical researches (according to the Medical Chronicle, Manchester, England, April 1900) during the summer of 1899, administered Petroleum in thirty-four cases of Infantile Diarrhœa. "The preparation was an emulsion containing 33-1-3 per cent. of Petroleum and the doses varied from 3ss thrice daily to 3i every four hours; the usual dose for a child a year old was 3i of the emulsion (℥ 20 of petroleum) thrice daily. In two cases salol was substituted at the end of a week. One child dies. In the remaining cases recovery was rapid and complete. There was derangement of the stomach, vomiting ceased almost before the diarrhœa was checked, and the stools soon regained their normal color and consistency. The emulsion seemed also to favor recovery from the accompanying bronchial catarrh. It is said that the whole quantity of petroleum ingested may be recovered from the feces. Clinical observation shows, however, that petroleum has an influence on mucous membranes other than those of the alimentary canal. Its action in cases of bronchial and vesical catarrh can be ex-

plained only by supposing that after absorption from the intestines petroleum is excreted by various organs. These experiments seem to prove that infantile diarrhœa can be treated successfully without the use of opium or astringents."

Angier's Petroleum Emulsion has been prescribed by the medical profession of the United States as well as of England, for many years for just this class of troubles and the foregoing results have often been verified in the hospitals of this country and by leading practitioners.

Angier's Petroleum Emulsion contains 33 1-3% of purified crude petroleum, 9 grs. of the combined salts of Lime and Soda, with Glycerine and emulsifying agents and was probably the Emulsion used by Dr. Fothergill. It is particularly adapted to the treatment of infantile troubles. It does not in any way disturb digestion or irritate the stomach, but on the contrary benefits them in every way, and children always like to take it. The Emulsion may be prescribed to be taken in a little milk or water, which eliminates all taste of the medicine.

A few days ago an alarming accident occurred in the Strand, London. By some means, the under-ground electric circuits were fired, with the result that the lid over a manhole in the footpath was blown high into the air. Large sheets of flame then shot into the air for a height of about ten or twelve feet, attended at frequent intervals with sharp explosions. The alarm was immediately given to the fire brigade, who were quickly on the spot, but it was instantly recognized that their efforts were of no avail in the quelling of the conflagration. They consequently had to stand by and simply watch the results of the erratic behavior of the electric current. In a few minutes, however, an electrician was on the scene and he quickly subjugated the outbreak by severing the wires. Such accidents as this are of frequent occurrence throughout the metropolis, but at this precise point the number of wires is very great, which rendered the incident far more serious than is generally the case.—*Scientific American*.

The attention of our readers is called to the advertisement of Robinson-Pettet Company which appears on page vi, of this issue.

This house is one of long standing, and enjoys a reputation of the highest character.

The preparations referred to, we commend specially to the notice of Practitioners.

STANDARD PREPARATIONS

Made for and Highly Endorsed by Medical Men Everywhere.

Unguentum Resinol.*Antipruritic, Antiphlogistic,**Nutrient and Plerotic***Elixir Cascanata.***Alternative, Laxative,**Antacid and Secernent.***Resinol Soap.***Prophylactic,**Germicidal, Etc.*

"Resinolis the best remedy I have ever used in Pruritus Ani."

—GEO. H. SMITH, M. D., Brooklyn, N. Y."

I have requested our druggists to carry UNGUENTUM RESINOL and RESINOL SOAP. They are all right.—

A. E. EARLY, M. D., Kingman, Arizona.

RESINOL has given me entire satisfaction. Its wide range of usefulness especially recommends it.—

LOUIS A. BOOKING, M. D., Louisville, Ky.

Am prescribing UNGUENTUM RESINOL with great satisfaction.—J. S. BEAUDRY, M. D., Chicago, Ill.

Have used RESINOL in many cases and am exceedingly pleased with its action.—G. E. WILDER, M. D., Sandusky, Ohio.

I cannot find anything that can take the place of RESINOL.—A. AGEE, M. D., Holbrook Ky.

I have found RESINOL to be a remarkable cure for almost any type of Sore.—G. D. BOUDOUSQUIE, M.D., Tuscaloosa, Ala.

I have prescribed RESINOL in many cases and am very much pleased with it.—SAM'L G. SEWALL, M. D., 1. E121st St., New York.

I have prescribed UNGUENTUM RESINOL with great success in Eczema, Pruritis Ani and Pruritis Vulvæ.—WM. LAMBERT, M. D., Kansas City, Mo.

I am more than pleased with UNGUENTUM RESINOL.—C. B. WALRAD, M. D., Johnstown N. Y.

All Leading Druggists carry these Goods.

RESINOL CHEMICAL COMPANY,

Samples sent on request.

BALTIMORE, MD.

The Nonpoisonous Dermal Parasiticide
EPICARIN
An efficient unirritating and agreeable substitute for Naphthol Preparations in Cutaneous diseases

The Sedative For Coughs and Analgesic
HEROIN HYDROCHLORIDE

The Agreeable and Efficient Substitute for the Salicylates
ASPIRIN

The Promoter of Natural Sleep
HEDONAL
Oxidized completely in the system into water and carbonic acid thus obviating any possibility of cumulative effects

The Odorless and Nontoxic Iodoform Substitute
EUROPHEN

The Safe and Agreeable Antineuralgic and Antirheumatic
SALOPHEN

The Uric Acid Solvent and Antiarthritic
LYCETOL

The Antigonorrhoeic and Substitute for Silver Nitrate
PROTARGOL

The Safe and Agreeable Nutrient and Tonic
FERRO-SOMATOSE

BAYER Pharmaceutical Products

For samples and literature of above products apply to
FARBENFABRIKEN OF ELBERFELD CO.
40 STONE ST. NEW YORK P.O. BOX 2660

A Few Suggestions on the Feeding of Infants.*

That the matter of artificial feeding of infants is second to none in importance, no one will deny. Statistics which show that the population of various sections of the world is stationary have been attributed to defective feeding of the little ones by artificial feeds. When a mother will not or cannot nurse her own child, it is not only a question of life and death for the little one depending upon its feed, but it is also a graver question for the community in which the child is to grow up. It is better a child should die than to grow up a charge and a danger to that community.

The proper feeding of infants means, therefore, also the moral and intellectual development of the being; and as it is made to incline by either good or defective feeding in childhood, so it is apt to incline in years to come. It was almost an established fact until recently, that a food that would do for a child at one age was not always suitable for another. It is highly essential to have foods so varied in composition as to be suitable to the different stages of development of a child's digestive organs. That it will be of interest to my colleagues to know that such a food can be had and that it may be readily prepared, I doubt not. The following cases will briefly substantiate the value of bovine:

Case 1. John H—, 6 weeks old, refused to nourish at the breast, was irritable and restless, with every indication that proper nutrition was not taken place. His bowels were constipated and he was beginning to lose flesh. He was put upon Pasteurized milk, to which a teaspoonful of bovine was added at each feeding of six ounces. He took this with a great relish by bottle, and in six days a decided change was noticeable. He seemed to be satisfied and became amiable. His bowels were regular; he slept well, did not cry and gained in weight and color.

Case 2. Johnny P—, seven months old, a weak, poorly developed child, could not sit up and took no interest in surroundings; weight about nine pounds; had no appetite, and when she did feed, took it mechanically. She had been using various Pasteurized foods and milk. In fact, her condition was such that it was very dubious as to her living. I however, decided to put her on Pasteurized milk and bovine, was ordered given in the proportion of a teaspoonful and a half to seven ounces of Pasteurized milk. At the end of three days a change in her condition was most

gratifying. She seemed to be heartier, and took more interest in things shown to her. From this time on her improvement was uninterrupted. At present, just 4 months after the beginning of this, she has five teeth; is bright; laughs and plays with her little brothers, and cries when hungry; sleep is uninterrupted and her functions regular. Also her weight is considerably increased.

Case 3. Carrie F—, fourteen weeks old; full term child, had been nursed from the first on prepared foods, but showed every evidence of malnutrition. She had nightly attacks of colic, and her bowels were constipated; after feeding she would vomit the food, her appetite was good but the food did not seem to satisfy her. She was put on Bovine and Pasteurized milk, a drachm of bovine to six ounces. She showed decided improvement from the first. After each nursing she seemed to be satisfied, would sleep considerably through the day, and five or six hours through the night; bowels became regular and soft; the attacks of vomiting and colic had ceased, and when she was discharged a week ago, had gained five pounds in weight.

Treatment of Whooping-Cough.

Godshaw (Medical Progress, August, 1899) laments the fact that notwithstanding persistent study and experimentation, we do not possess any reliable means for cutting short an attack of whooping-cough. The best treatment will do no more than palliate symptoms and diminish the frequency and severity of the paroxysms of coughing. This, however, is very beneficial and frequently essential, especially during the night. An opiate, when carefully selected, will yield the desired results without doing harm probably better than any other drug. Papine is the best and should be given in doses of five to ten drops to an infant one year old. Older patients will require proportionately larger doses. The object should always be to lessen coughing that the child may be able to sleep, and not to produce sleep. Some physicians rely chiefly upon antispasmodics—belladonna, bromides, asafetida, etc., but these frequently fail. The inhalation treatment has not proven as satisfactory as was at first hoped. The inhalation of steam is valuable to facilitate expectoration. Careful nursing to avoid complications, and the judicious use of Papine will do much to lengthen the interval between fits of coughing even during the daytime and thus husband the little patient's strength.—*Medical News.*

*By T. J. Biggs, M.D., Stamford, Conn.

Vapo-Cresolene.

Cures while they sleep.

Whooping Cough, Croup, Asthma, Coughs, Colds, Catarrh, Bronchitis, Grippe.

An antiseptic, antispasmodic and prophylactic, to be vaporized for the treatment of Whooping Cough, Croup, Bronchitis, Asthma, Diphtheria, and kindred diseases of the throat and air passages.



It takes time to prove the value of a remedy. CRESOLENE has over twenty years behind it and the assurance of a vigorous and growing demand, besides the personal acknowledgment of many physicians, that it is the best remedy, particularly for Whooping Cough and Croup ever introduced. The application of CRESOLENE is simplicity itself. The Vaporizer acts from five to six hours without attention. The patient breathes the medicated air of the room. The treatment being by inhalation does away with the necessity of waking the patient, which, in itself, is of sufficient importance to warrant giving it a trial. CRESOLENE may be used in connection with any other treatment, and is used with success in the treatment of Diphtheria, Scarlet Fever and Measles. When used for the two former diseases and Membranous Croup a tent should be built around the bed. CRESOLENE is a product of coal tar, of much greater antiseptic power than carbolic acid. Send for descriptive booklet, containing physicians' testimonials and price list.

NOTICE.—Physicians will be allowed a liberal discount, express paid on first order, and money back if not satisfied.

THE VAPO-CRESOLENE CO., 180 Fulton St., New York.

Female Neuroses.

Cerebro-nervous affections peculiar to women associated with pathological disturbances of the reproductive organs, are legion and most trying to physicians and patient. Physicians are aware of the wide prevalence of these nervous disorders, for comparatively few women are entirely free from some phase of the ailment.

Neurasthenia, neuralgia and other manifestations either of an active or passive character are common and are always peculiarly rebellious to treatment. Neuralgia constitutes the great cause of danger from the employment of hypnotics and narcotics, which only afford relief by numbing but effect no cure. On the other hand, the formation of a drug habit rather aggravated the condition from which relief was originally sought. I have found nothing so well suited to these cases as five-grain antikamnia tablets, administered in doses of from one to three tablets and repeated every one, two or three hours according to the attendant's judgment. These tablets not only afford complete relief without fostering a drug habit, but they do not endanger weakened hearts as is the case with so many other coal-tar derivatives. Being free from opium and allied products their exhibition is attended with no unpleasant after-effects.

I use them, therefore, in preference to any other preparation in the treatment of female neurotics, and experience demonstrated that they are safest and best.

PROF. CHAS. J. VAUGHN, M.D.,
Chair Gynecology, Atlanta College of Physicians and Surgeons.

Kafir Cure for Dysentery.

It is reported that several of the army surgeons have tried the Kafir cure for dysentery with marked success in some very bad cases. It consists of a decoction of the root of the pelargonium or geranium. There are upward of 150 different kinds of wild geranium in South Africa, and each seems equally efficacious in cutting short an attack of dysentery. The Kafir and Zulus simply chew the geranium root, but a more elegant preparation is made by boiling the root in milk. One or two tablespoonfuls are given every two hours till symptoms of dysentery have disappeared. It would be desirable to obtain the name of the species. Our native geraniums, while having a mild astringent action, are not very efficacious in dysentery.—*Medical News*.

Always put off until to-morrow anything you haven't time to do thoroughly to-day.

R—One teaspoonful of CERINA four times a day for vocal, mental and physical fatigue. One teaspoonful of CERINA taken just before singing or speaking strengthens the voice.

RIO CHEMICAL CO.,

St. Louis, Mo., U. S. A.

An American Need.

According to Spiers, in a recent number of the Cincinnati Lancet-Clinic, the great American need is independent, original thought. This is a plain, simple statement of a truth that is becoming more recognizable daily. Despite our great confidence in ourselves, we are too apt to imitate the work done in other lands simply because it comes from afar. This is as paradoxical an attitude as the Irish bull of speech. The Irishman, for instance, said that the only kind of people who could live quietly together were the dead, and so we give the lie to our common conceit that we do all things better than others, by ignoring our own opportunities for original work in the weak imitation of others at a distance. This servility would be excusable in those unable to do independent work, but it is degrading when done needlessly and fulsomely. The fact is that we are sadly in need of a healthier and more vigorous tone in the profession of medicine as well as in many other departments of learning, though there can be no question about our having done some splendid original work in some respects. As a nation we excel all others in mechanical pursuits and devices, and the reason for this probably lies largely in the fact that there is not the same degree of social intercourse among the individuals representing this department of our activities that there is, for instance, in that of medicine.—*Medical Council*.

Wait until the grass is long enough to cut before making hay, whether the sun shines or not.

People who Think They Know More than their Physicians

There is a class of people who patronize physicians and get their advice and prescriptions. They neither follow the one nor take the other. Sometimes they get well, notwithstanding, yet we feel that this is not a proper course to pursue if you are sick, because the chances are that, if your physician is a properly educated man, of good sense and judgment, he is far better able to direct you than you even suppose.

Medicine is not a perfect science; yet earnest men of the brightest and most devoted intellects have been searching for truth, and making experiments of the most exact character for years to obtain useful knowledge, to preserve human life, and lessen human suffering.

When a physician as described above says you must follow this or that direction for the safety or benefit of your health, you will give indication that you possess wisdom by following his suggestions. You may not be able to see all the ins and outs, all the whys and wherefores. This is not to be expected. Nevertheless, as before intimated, your safety lies in obeying orders. If you begin to doubt, change physicians, but while you are nominally under a doctor's care, obey his orders. No other course does justice either to him or to you.—*Healthy Home*.

Dark Tenement House Stairs and the Award of Damages.

The Appellate Division of the Supreme Court on July 18th decided that persons injured in falling down stairs in a tenement house in which the hallways are unlighted are entitled to damages, and also that in case of its being a woman who is injured the husband may recover damages for the loss of the services and society of his wife. In a case in which a woman sustained serious injuries by falling down the stairway of a tenement house at night she brought suit and secured a judgment for \$2,750, and her husband also brought suit and was awarded damages. The landlord of the house appealed from the decision of the lower court, but the Appellate Division upheld the judgments, citing the law which requires that in the city of New York a light shall be kept burning in the hallways on each floor of all tenement or lodging houses from sunset until 10 P. M.—*Boston Medical and Surgical Journal*.

A jack of all trades at work is better than an expert always out of a job.



Cystogen

CYSTOGEN is the most eligible uric acid solvent and prophylactic in the treatment of gout and gouty rheumatism because it may be given indefinitely without gastric disturbance and because it maintains the normal acidity of the urine, gives prompt relief in acute attacks and in chronic conditions rapidly removes deposits.

By its solvent properties, it cures urethritis and cystitis when caused by uric acid or phosphatic deposits.

It is an unequalled genito-urinary germicide.

Usual dose:—5 grains, dissolved in water, four times a day. May be increased to 40 grains per diem.

Procurable in crystalline powder and five grain tablets. Literature and samples on application.

CYSTOGEN CHEMICAL COMPANY,

ST. LOUIS, MO.

B 39

Notice-- SANDER & SON'S EUCALYPTOL is invaluable in inflammation of the mucous membranes, and in all septic and infectious diseases. Apply to Dr. SANDER, Belle Plaine Iowa, for sample and literature of Sander's Eucalyptol. Meyer Bro.'s Drug Company, St. Louis, Mo., Sole Agents.

Texas and the Quacks.

Texas will now be the great haven for quacks, as a judge in that State has determined that any person holding a diploma from a medical college that received its charter from the Legislature of any State in the United States makes the charter valid and entitles the holder of a diploma from such a school to the right to practice medicine, regardless of whatever laws any State may make. It seems that the judge must have had his head pretty badly muddled, for, according to the distinguished gentleman's decision, any State has a right to make laws for another.

We had always believed that there was some such a thing as State rights, and, in fact, we know that there is, and it is dollars to doughnuts that when the case is appealed, as it will be, the decision of the lower court will go skyward in a hurry. The profession of the great State of Texas is made up of the very best material in this country, and we are sure that they will not rest under such a burden as this.—*American Practitioner and News.*

The X-rays have been subjected to a novel purpose in Calcutta. A thief was supposed to have stolen a diamond worth 10,000 rupees and to have effectually secreted it on his person by swallowing it. Expert thieves in India temporarily secrete small valuables of this description in the throat. It is called "pouching," and the thieves undergo special training in order to render them proficient in the art. The plan is very simple. A small piece of lead is attached to a thread, and this the neophyte swallows, then by the action of his tongue he guides the lead to the orifice of the sac in the throat. The pupil is prevented from completely swallowing the lead by the piece of thread which the teacher holds. When the man has become skillful in this act of swallowing, the leaden pellet is coated with lime, which has the effect of enlarging the sac so that it becomes capable of retaining large articles. In the case of Calcutta the Roentgen rays revealed the presence of some obstacle in the throat, but its precise identity could not be gathered.—*Scientific American.*

Some Notes on the Use of Mercuriol---A New Remedy in Urethritis.*

By Ramon Guiteras, M.D., Professor of
Genito-Urinary Surgery in the Post-
Graduate Medical College of New
York. Lecturer on Genito-
Urinary Surgery in the
University of the
City of New
York.

The author states that he has thoroughly tried Mercuriol in his clinic, and from his experience has drawn certain conclusions which he presents in this paper. After describing the chemical nature of Mercuriol he states that he found the weaker solutions had little effect and the stronger solutions were at first irritating. He finally concluded that the average strength best borne by the patient is ten grains to the ounce, or approximately two per cent. After having reached this conclusion he had the histories of 100 cases recorded, in 33 of which an examination for the gonococcus was made, revealing its presence in 30 cases. In the remaining 67 cases a clinical diagnosis was depended upon, since the writer considers the experienced eye competent to recognize the disease. In one extremely interesting case no gonococcus could be found in the urethral discharge, although gonococci were present in that of some venereal ulcers on the glans.

In these cases a two per cent. solution of Mercuriol ordered which the patients were directed to inject three times a day, after micturition; the injection to be held within the urethra for five minutes at each operation. The clinical reports of the cases show that frequently in two days after beginning the use of Mercuriol, gonococci could no longer be found in the discharge.

The author discusses at some length the value of the term "practically cured," and sums up his argument by saying that to draw conclusions of value we should consider only cases that have been under treatment for three or more weeks, omitting those making but a few visits. On this basis he eliminates all but 65 cases from his report and tabulates these as follows:

Ten cases were cured in four weeks, or 15 per cent.; fifteen cases were cured in six weeks, or 23 per cent.; twenty cases were practically cured, as there was no discharge, though there were some shreds in the urine at the end of from four to eight weeks, 30 per cent.

One of the most valuable observations that the writer has made is the fact that *only two cases suffered from complications*, one having developed gonorrheal rheumatism and the other epididymitis. He states that this fact in itself would tend to argue much in favor of the use of Mercuriol, for where is there any other solution or mixture which does not show a greater percentage of complications? When we consider that many writers claim that epididymitis occurs in 20 per cent. of all cases of urethritis, the rate of 1 per cent. reported in this series of cases argues much in favor of Mercuriol as a harmless, yet efficient injection.

Another interesting feature is that in only one of the 100 cases was there any marked posterior urethritis. Therefore it would seem that *Mercuriol quickly destroys the gonococcus, lessens the severity of the inflammation, and tends to prevent the development of complications*. From a comparative study of the different methods of treating gonorrhea the author concludes that treatment with Mercuriol is an advance beyond the old methods with balsamics and astrigent injections.

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JOHN MEARS,

Med. Examiner Pacific Mutual Life Ins. Co.

Miss Ward writes from Brazil that the whole country is perpetually in a state of semi-intoxication from coffee—men, women and children alike, and to babies in arms it is fed from a spoon. It is brought to your bedside the instant you are awake in the morning and just before you are expected to drop off in sleep at night, at meals and between meals. The effect is plainly apparent in trembling hands, twitching eyelids, mummy-hued skin, and a chronic state of excitability worse than that produced by whiskey.—*Medical Times*.

* Abstracted from the Lancet, London, Eng., Sept. 22, 1900.



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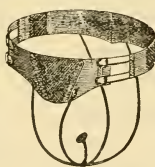
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Christian Science and Insanity.

Miss Myra Andrews, thirty-two years old, a dressmaker, was removed to Bellevue Hospital, August 27th, violently insane. It required the combined efforts of Drs. Stewart and Sheldon, of Flower Hospital, two policemen and the ambulance driver to get the woman into the ambulance. Miss Andrews became ill a week ago. She had some time before that taken up the study of Christian Science and had practically accepted it as her faith. When her illness came she resolutely declined to call a physician or take medicine.—*Medical News.*

There is a good opening for a homœopathic physician at De Lamars, Bully Hill mine, thirty miles from Redding, Cal. A young man with some knowledge of surgery preferred. Particulars supplied by the Business Manager.

We find the above notice in one of our most readable exchanges. Is it usual for the young homœopath to know nothing of surgery? Is he supposed to learn this branch after he graduates? We merely ask for information. On further consideration we suppose that the higher potencies are so potent that surgery is really unnecessary.

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His Gestures.—Probably the Catholic Standard, which prints this dialogue, did not intend that stiff and awkward elocutionists should take it as a helpful hint:

Teacher.—Your recitation was extremely good, Johnny. The gestures were particularly natural. Where did you get them?"

Johnny.—"Git what?"

Teacher.—"The gestures."

Johnny.—"I ain't got the gestooors. It's hives."

A rolling stone gathers no moss, but a stationery man gets his living from the writes of others.

A recent baptismal narrative told at a dinner table is of a negro woman who brought forward twins.

"Their names?" bent over the preacher, in inquiry.

"Dis one is Bigamy, after his paw, and dis one is Eczema, after her maw."—*New York Evening Sun*.

The Grocer.—Yes, sir, this grano-grino is the best breakfast food on the market. It is predigested.

Mr. Fadsby (shuddering)—Bless my soul! By whom?

The Charlotte Medical Journal.

VOL. XVII.

CHARLOTTE, N. C., DECEMBER, 1900.

No. 6.

The Hospitals of Japan.

By Edw'd C. Register, M.D., President of the Board of Medical Examiners State of North Carolina; Ex-President of the Charlotte Medical Society.

Japan has few hospitals, only ten. This is certainly a very small number when we consider that the country has a population of forty-five million and several large cities, one as large as Philadelphia, and three with five hundred thousand inhabitants each. It has a few cities with a hundred thousand people and no hospital at all. Tokyo, the capitol of the nation, only has two, the Imperial University Hospital and the General Hospital.

The former is the largest and in many respects as good as any institution of the kind I have ever seen. It is as large as all the other hospitals of Japan put together. It is almost entirely maintained by the government. It has eighty resident physicians and six hundred trained nurses. The average number of patients treated there is twenty-two hundred, and in the various out-door departments many thousand sick people are treated annually. The main building makes no pretensions to architectural beauty; it is a perfectly plain two-story brick and stone structure, a hundred feet wide and four hundred feet long. It is located in the middle of a beautiful park, with its lawns, green terraces, tropical trees and plants, playing fountains and here and there artistically arranged and various shaped, are comfortable looking rests or seats, some in the sun, others in the shade, many grouped around fountains, while some are scattered along little rippling streams. Here landscape gardening has reached the highest state of development.

This building is only used for offices, reception rooms, parlors, library, museum, billiard rooms, drug rooms, and the microscopical department. This microscopical laboratory is the largest and most complete I have ever seen. Here I had the pleasure of meeting the celebrated Dr. Kitasato who was sent, several years ago, to China and India by the Japanese government to investigate the Bubonic Plague, and who successfully isolated the bacillus of this disease.

He is evidently a very scientific man and an accomplished physician.

With the exception of the operating rooms, all the other buildings connected with this institution are one-story high, made of wood, and join the rear of the large stone building, leading off from it at right angles and parallel with each other. They are four in number and extend back possibly five hundred feet. About every hundred feet they are connected with each other by covered bridges with glass sides. On both sides of all the wooden buildings, there is a narrow veranda which is usually closed by sliding glass doors. All the wooden buildings are painted white, inside as well as outside.

The physicians and nurses wear white uniforms, European in style. With all this perfectly clean and glittering glass, surrounded by so many flowers and shades, with the sun's rays peeping in here and there, it certainly looks beautiful and healthy.

Connected with these buildings, there is one for the physicians, one for the nurses, and one for the servants, a department for lying-in patients, one for contagious diseases, and one for the insane. The architecture of them all is uniform, the distance between them, and the way they are connected, are all identically alike. Several other buildings, used for minor purposes, are scattered about over the park, making a perfect net-work of houses, all conveniently arranged and magnificently kept.

The surgical department is a large two-story stone structure, plain, but rather handsome. It stands off to itself. It is a comparatively new building, has only been finished about a year. It has several operating rooms and amphitheaters, and can take care of about two hundred surgical cases at a time. Minor cases are usually cared for in the main hospital building.

Surgeons in this country are very conservative, a great deal more so than in America. Patients are slow to consent to be operated on. They have to know that it is their last chance before they will consent. This is not because they are cowards or not as brave as other people are. It is because they have acquired, and to some extent inherited, a prejudice against surgery. This is not peculiar to the Japanese, it is characteristic of all oriental-semi-civil-

ized people where Buddhism exist. Some of its former teachings prejudiced the people against surgical operations. To cause bloodshed except when favored by their god of war was a great wrong. There was no exception to this rule, even in their relations to the lower animals. To a great extent this prejudice is gradually being overcome.

This makes the surgical work of this great hospital rather small when compared with its other departments. It has septic as well as aseptic operating rooms. In the former, they pay very little attention to cleanliness, but in the aseptic operating rooms every thing glitters and is in perfect order and is, no doubt, thoroughly aseptic. In and around these operating rooms you can see large and beautifully arranged instrument cabinets filled with every apparatus and appliance known in connection with modern surgery. The most of them are made in Japan, but they import some of them from Germany, England, and a few from America. The wards were overcrowded, and the rooms for single patients are very small, not over ten feet square, and, strange to say, in an institution so modern and so well equipped in so many respects, would furnish their first class rooms, just as they are in a hotel, with velvet carpets, rugs, curtains, cloth covered sofas and chairs.

The crowding of their wards to overflowing seemed to me cruel, yet the patients looked comfortable, and many of them happy. Both sexes were often in the same ward, being bathed and dressed at the same time, without any embarrassment to any one.

It has been said that nudeness can be seen in Japan more than any other place in the world, but it is never looked at. The correctness of this was impressed upon me when going through the wards of this hospital.

While the surgeons in this country are very conservative, they are not timid. Many of them do excellent work. I spent a day in this Imperial University Hospital, saw several operations, and I observed nothing that was not intelligently and skillfully done. One young assistant surgeon, who could speak a little English, told me that he had used the Murphy button seventeen times without a single failure, and that the chief surgeon had performed seven laparotomies for perforation in typhoid fever and had saved three cases.

I was astonished to see so many cases of tuberculosis in this hospital. Forty per cent. of the inmates had tuberculosis. Going back over the records for five years

shows that thirty-five per cent, of all cases admitted were tuberculous. This great susceptibility to tuberculosis, on the part of the Japanese, was something new to me. Statistics show that thirty-two per cent. of all deaths in Japan is due to tuberculosis. In America it is less than fifteen per cent. and we are justly alarmed.

Rheumatism was the next most prevalent disease I found in this hospital, and skin diseases were very rare.

It is easy to observe the causes of consumption in this country. Leaving out all hereditary tendencies, the habits and customs of the people would naturally cause it to develop. Their houses are always built on the ground, uniformly one-story high, few windows and they are like pigeon holes. They have few facilities for heating their houses. Even in the coldest weather they will do without fire, consequently their homes are cold, damp and dark, just the conditions and surroundings to favor the development of tuberculosis. Besides a Japanese seldom has anything on his floor. Sometimes among the better classes they will use a straw matting, something like we use in the summer. They always take off their sandals or wooden shoes at the door and wear nothing on their feet while in the house, no matter how cold and damp it is. With these conditions and methods of living it is not surprising that consumption and rheumatism are so prevalent.

The absence of skin diseases among the Japanese is evidently due to their cleanliness. I suppose they bathe more than any people in the world. There are over eleven hundred public baths in Tokyo alone, and it is estimated that four hundred thousand people patronize these baths daily. They use the water a great deal hotter than we do in America, seldom under 110 deg. Fah. and often 118 or 120 deg. Fah., and remain in the bath for hours, especially in the winter, as it is a cheap way to keep warm. It costs them one sen for each bath, about a half cent in American money.

I noticed in the Imperial University Hospital that they were giving creosote in pulmonary tuberculosis, in seventy-five drop doses, three times a day, injecting serums made in Germany, and experimenting with some made by themselves. They were using inhalers and sprays just as we do, and I suppose with about the same success.

The General Hospital at Tokyo is quite a nice institution. It is partly under the control of the Red Cross Society of Japan. It has twenty resident physicians and two hundred trained nurses. Its average attendance is seven hundred, besides thousands of sick people are treated in its various out-

door departments. The buildings are old and the grounds have an appearance of dampness and neglect, a lack of brightness that does not very favorably impress a visitor. The general arrangements of the buildings are on the cottage plan, with one very large brick building which is used for the officials of the hospital. The operating rooms are fairly well arranged and equipped. They will compare very favorably with some of our large hospitals.

The Yokohama Hospital is small and badly arranged, and evidently poorly managed. It is attended by a staff of three physicians, who live in the city. The building is old, damp and dark, surrounded by no gardens or yard.

Kioto, the old capital of Japan, a city of six hundred thousand population, only has one good hospital. This is the Kioto Hospital Medical School. It is a hospital and medical college combined. They are under one management and the buildings are connected. The grounds cover ten acres and are beautiful. The buildings cover about three acres and all but one of them are made of wood, and are two stories high. The main building is three stories high, built of stone, and it is new and a handsome structure. Twenty-eight physicians are connected with this school and hospital. Twenty-one students were graduated last March. All the physicians live in little cottages on the hospital grounds, and the students room in the main building. Three physicians from Germany and one from Holland teach in the medical department. It is partly supported by the city government.

About five years ago all of its buildings were destroyed by fire and they have only in the last year finished rebuilding them, consequently every thing is new and up to date. They have two operating rooms not connected with amphitheater halls. I have never seen anywhere two operating rooms more conveniently arranged or more thoroughly equipped. Here pharmacy is taught as well as medicine.

Several years ago the medical school was divided into a medical school proper and a preparatory medical school. When a student begins with the preparatory studies it takes him twelve years to graduate. This hospital has the most complete hydrotherapeutic establishment of any in Japan. It occupies the basement of the main building and is thoroughly modern in every respect. It comprises a Turkish bath, vapor bath, Charcot's douche, electric baths, sulphur baths, iron baths, and a suite of hot and cold baths with sprays. Annexed to this de-

partment is a completely fitted medical gymnasium.

The Doshesha Hospital at Kioto is kept up by a Canadian mission. It has no resident physician and only one trained nurse, who is from New York. Three physicians attend the hospital, each a week at a time, in rotation. They have six or eight beds fixed up especially for foreigners, and many Europeans and Americans have been cared for there.

Nagoya, a city of two hundred thousand population, has only one small hospital. It is a private institution, run by three rather bright, enterprising young Japanese physicians. The buildings were not originally constructed for the purpose for which they are now used. The grounds are small, no lawns, and few shades. The surroundings had a dilapidated, neglected look, and the inside was dark, damp and had a mouldy smell. Their little operating room looked neat, but was poorly furnished. They had sixteen patients, but none of them were surgical cases.

Osaka has a city hospital. I did not have an opportunity to visit it.

Kobe and Nagasaki each has a hospital. The one at Kobe interested me greatly. Its buildings are very large and it is evidently well patronized. They have eighty trained nurses, and an average of two hundred and fifty patients. Its reception rooms for out-door patients were crowded to overflowing. The general operating room for third-class patients, interested me more than anything surgical I have seen in Japan. Here seven operations in one room were being performed at one time. It reminded me of Barnum's circus, it had so many attractions going on at one time. It had no preparatory ante-room for undressing or dressing. The anesthetic was administered and, in fact, everything connected with each case was done in this one room. Female as well as male patients were admitted and treated or operated on as their time came. I noticed one surgeon was operating for urethral stricture in the male, another setting a broken arm for a little boy, while another was doing gynecological work. Only seven physicians remain in the hospital at night, all the others live in different parts of the city. I could not learn how many were connected with it or how they were appointed,

The Red Cross Society has recently established a hospital in Kobe. The day I visited it, it only had three patients, one nurse, and no resident physician. I did not see the hospital at Nagasaki. I understand it is used partly for the Japanese

navy. America, England and Germany all have naval hospitals at Yokohama.

I suppose it might be said that there are a great many other hospitals in Japan that I have not mentioned. There are many little mission hospitals where they are doing dispensary work, and often they have a few beds where they take care of three or four patients at a time. A great many physicians have their own little private hospitals. I visited several of them. They are so small, have so few facilities, and are so poorly patronized, that they are not recognized by the local city directories. The Japanese army has several hospitals. I did not, of course, visit them.

The Imperial Hospital at Tokyo, that I described at first, seems to be the medical centre of Japan. Nearly all the best people, throughout the country, when they have to submit to any important surgical operation, or have any serious complicated disease, go there. The distance from any part of Japan to Tokyo is short, the railroad facilities are good and the fare is less than a cent a mile. This makes the surgeons, physicians and specialists there very accessible, and they are patronized more than they are in any other part of the country.

The Japanese physician is peculiarly fitted for certain departments of medicine. It is characteristic of the best element of the race to be industrious, deliberate, careful, and he loves more than anything else to work for days, weeks, and even months, at a single little thing. Mr. East certainly knew the people well when he tersely said that they seemed to be "great in small things and small in great things." I notice that they are enthusiastic workers in microscopy, their patience seems never to tire; they will prepare slide after slide, specimen after specimen, and their interest never sags. This kind of work suits them.

In surgery the smaller and more delicate and difficult the operation is, the more it interests them. The average Japanese physician would rather see a cataract operation than a hysterectomy. To watch them prepare for an operation, the time they seemingly throw away arranging little things, the minute instructions they give their assistants and nurses, even in minor surgical cases and to observe them fix, with so much care and deliberation, every table and tray, every knife and sponge, perfectly oblivious to time, is as amusing as it is tiresome to the hustling, restless, and impatient American.

Nagasaki, Japan, Oct. 23, 1900.

Ætiology of Pleurisy.*

By C. P. Ambler, M.D., Asheville, N. C.

The more one is thrown in contact with pulmonary diseases and the more he limits his practice to diseases of the chest, is he struck with the fact that pleurisy does not receive near the attention and pains-taking care or investigation that this condition would warrant. The laity for some reason or other, (and it is probably due in great part to the contempt which the physicians have had for the milder cases) have come to look upon a "touch of pleurisy" as a simple affair, and the condition, while to be regretted on account of the pain experienced, to be one, nevertheless, in which no seriousness of danger exists. The physician seems to have forgotten that the pleurisy which is present does not constitute the disease of itself but very seldom, but that it is the result or local manifestation of some condition going on in the economy of the individual, and is almost without exception of a serious nature.

It was formerly supposed that over-work, general debility, malaria, contracting a cold or chill were common causes of pleurisy, whereas, our later investigations in Pulmonary conditions have now shown us that while pleurisy as a disease is often found associated with or following one of these conditions, the condition of over-work, debility, malaria, cold, etc., have simply been the exciting causes in the development of the disease, which in many cases has long existed and been present in a latent form.

In many instances the patient simply has a "pain in his side" for a few days and the same having disappeared, he congratulates himself upon having escaped with a "touch of pleurisy," whereas, in fact, if a careful investigation had been made of the condition, it would be found that there is an old pleuritic inflammatory trouble present; the chronic disease could be determined and much suffering in the future be avoided.

The cause of pleurisy may be either external or internal. Under the external causes would come only traumatism. The ætiology of this external cause would be obvious enough, but in those cases wherein inflammatory trouble has arisen from some systemic or pulmonary condition, the ætiology of the disease may be extremely difficult to determine.

Excluding external causes we can conceive of local causes under which would be,

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caries of the spine; escape of irritating matter into the pleural cavity, either from the costal side or from the pleural side; from disease of bronchial glands or the escape of mediastinal abscess; or from the entrance of pus or foreign bodies from the abdomen, as in gall-stone or sub-phrenic abscess. The presence of foreign bodies in the œsophagus can also be imagined to be the cause of sufficient inflammatory action to cause pleurisy, or, such foreign bodies may penetrate the œsophagus and find their way into the pleural cavity.

The older practitioners and in fact, some of our present text-books, cite a long list of diseases which are given as a systemic cause for pleurisy, but in the most of such writings it is also admitted that the systemic causes of pleurisy are very obscure and but very little is known of the way in which the disease is produced. For instance, where the older writers stated emphatically that a chill also was frequently the cause of acute pleurisy, our recent investigations have shown that exposure to cold is not likely to develop pleurisy unless some pleuritic disease was present beforehand, moreover, the disease which already existed in many of these instances, has greatly predisposed the patient to the chill, while it has been formerly taken for granted that the chill was the cause of the pleurisy itself. There can be no doubt that depression of the nervous system or processes of nutrition by over-work, or the exhaustion and debility brought on by serious illness of any form, should be mentioned as predisposing causes for an acute attack, but that these conditions in themselves are sufficient to produce pleurisy is not now accepted as readily as formerly. A rheumatic or gouty habit is believed by many to be the direct cause of pleurisy, but even here it becomes a question if there has not been some pleuritic diathesis that has only developed.

We have all noticed that acute pleurisy occurs as a complication in many diseases and in many of these instances we have been absolutely at a loss to understand or account as to why the pleuritic condition has occurred. Our teachings of to-day are bringing us to the belief that the pleurisy which has arisen, as a complication of any serious disease or malady, has simply developed its acute form on account of the lowered vitality of the patient produced by the primary disease.

Acute pleurisy accompanies almost all of the inflammatory diseases of the lungs. It is rarely absent in acute pneumonia and is undoubtedly the cause of the greater part of the suffering in this disease; it also occurs associated with the various forms of

heart disease, and particularly is it associated with pericarditis. While it occurs as a complication in many diseases, it is much more liable to be observed in such diseases as have pulmonary symptoms; for this reason it is met with in measles, diseases of the kidneys, septicæmia and such conditions as give rise to effusions.

What we term as "Idiopathic Pleurisy" occurs more often on the left side than of the right and is rarely bilateral. When the cause of the trouble is due to the disease of some distant organ, it is then more often found to effect both sides but not to the same extent.

It is no respecter of age, as it is frequently met with during the first six months of life and is not rare even in old age. Many cases occurring in children are overlooked from the fact that in these little patients it does not manifest itself to any great extent and little displacement of the viscera follows. It occurs with the greatest frequency at about middle age, and, as a rule, the younger the patient the more readily will such an effusion become purulent. The male sex is more frequently affected than the female; while it is commonly supposed to be much more frequent in winter than in summer, statistics bear out the fact that season has very little to do with it.

As stated in the first of this paper, the ætiology of many of these cases is extremely obscure and in place of treating the patient simply for his pleurisy and of losing sight of the case as soon as the pain subsides, we should always follow these cases up carefully. Let us determine as near as possible the factor which has been the cause of the trouble, and, while we do not wish to give it as our opinion that pleurisy is not met with as a disease (excepting traumatic cases) unless tuberculous infection is present, we nevertheless, have presented this paper with a view of making the statement that the great majority of these cases of pleurisy, so-called and treated, are, in fact, nothing more or less than an acute manifestation of a tuberculous disease of the pleura, which disease has been present in many cases for months or years in a latent form: the patient from exposure or over-doing himself, from becoming debilitated, run-down or depleted from other diseases, simply presents a condition wherein as a rule the tuberculous disease in the latent form take on more or less acute symptoms; as the patient improves in his nutrition and general condition, the tuberculous condition again becomes latent and may remain so for months.

It is not our intention to claim that all cases of pleurisy are tuberculous, but it is

our wish to emphasize the fact that if the physician would follow up his patients carefully, in many cases of what has been supposed to be simply pleurisy, this "simple pleurisy would be the means of arriving at a diagnosis of a tuberculous disease of the chest.

DISCUSSION:

Dr. J. A. Burroughs.—I have listened to Dr. Ambler's paper with considerable interest. There are many causes for pleurisy, and among them we might note syphilis. This is sometimes the cause of pleurisy. We sometimes see pleurisy developing in typhoid fever, which is undoubtedly the result of the bacillus typhosis, and again we see it developing in other acute affections, which is undoubtedly due to the germs of the disease, which has affected the pleura. I have noticed pleurisy developing in diseases where there is considerable debility, where the patient has laid in one position for a considerable length of time, pleurisy both with effusion and without effusion. There is no question in my mind that the most frequent cause of pleurisy is tuberculosis. I have had charge also of a number of school girls, possibly three or four thousand, and they frequently complain of pains in their sides, acute pleurisy pains which come on for a day or two and then pass off and come again. If you will examine into their history you will find they have tubercular ancestors, and bad lymphatic systems. You never see a case of pneumonia without more or less pleurisy. I was struck by some scientific investigations by some German, who applied the tuberculine test to a number of pleurisy patients, and 100 per cent. re-acted to the tuberculine test. I also noticed Dr. Hedge, of Minneapolis, who had 18 cases, and when the tuberculine test was applied 16 of the 18 re-acted to the tuberculine. These investigations are very suggestive. I am satisfied that the great majority of the cases of pleurisy I have seen were of tubercular origin.

Dr. Millender.—I think we run the risk sometimes of being biased by the special class of work that we do. The great majority of pleurisy cases that we see in Asheville are undoubtedly tubercular. We are all specialists here, to some extent, and see so much tuberculosis that we are apt to be a little off sometimes on account of that fact. Personally, I do very little work among tubercular patients, and I only remember three or four cases of well marked pleurisy in all my practice since I have been in Western North Carolina. Dr. Burroughs remembers two or three thousand, the great majority of which he thinks were

connected with tuberculosis. I do not remember having seen a single case that I could trace to tuberculosis. I examined a case of pleurisy in my office not long ago. A very robust man was applying for life insurance. He had an excellent family history and was a very robust man himself, with a good lung. He had had a tube in his side where he had had pleurisy with effusion. Another case I remember also had pleurisy with effusion. He had a good family history, and has gotten well and is as well now as he ever was. Aside from the great majority of cases we have that are tuberculosis, we still find the most predominant causes in this mountain section, so far as I have been able to judge, the result of grippe, and the grippe does not necessarily end in tuberculosis. I know we see cases sometime that look very much like tuberculosis. However, if we make a bacteriological examination, our minds are disabused of the fact, and the grippe germ is found to be the exciting cause. Two of the cases I have treated were well marked cases of grippe, and the inflammation of the pleura came on late in the disease after the patient was prostrated, just as it comes on in any other disease, after the vital forces have been reduced. I believe that the common causes of pleurisy which we see attended by the formation of pus in the pleural cavity are some other germ than the tubercular germ. They are probably caused by the germ which causes grippe, or the germ which causes bronchial pneumonia, namely, the diplococcus of Fraenkel.

Dr. Peavy.—It is probable that most cases of chronic pleurisy are tubercular either as a primary tuberculosis of the pleura or as secondary to tuberculosis of the lungs. There are those who believe that all cases of pleurisy are tubercular. This view I cannot accept. In my opinion a majority of cases of acute pleurisy are closely related to rheumatism and gout, the uric acid diathesis being a strong predisposing factor. The influence of what is commonly called a cold is also well recognized in the causation of these cases. It is very true that "colds" are infectious processes, but cold itself, that is, the undue chilling of the body, favors the development of infectious inflammation of the pleura just as it does inflammations of other structures of the body. A child destroys for the time the equilibrium of the nervous system and weakens the capacity of the organism to marshal its defensive agencies, at the same time interfering with the elimination of uric acid and allied products of tissue change. These products accumulating act as irritants, especially

upon structures subject to motion and friction as joints, tendons, the pleural surfaces, &c. They tend to establish at such a point a *locus minoris resistenciæ* and thus favor infection. The pneumococcus, the streptococcus, the grippé germ and its relatives and derivatives are more in evidence in such inflammations than is the bacillus tuberculosis. Of course these irritants may favor the development of tuberculosis in the same way, acting as does traumatism by producing weakened resistance. A discussion has recently been going the rounds as to the relations of the uric acid diathesis to tuberculosis. Two antagonistic positions are held on this question, one party maintaining that an excess of uric acid in the system favors the development of tuberculosis, the other holding that not only does it not act in this way but actually protects against tuberculosis. My own position is emphatically on the affirmative side of this question. I certainly believe that the faults of nutrition covered by the term *uric acid diathesis* produce a general weakened resistance, and further that the special products of suboxidation elaborated in these conditions act locally to produce "weak points" and favor the development of infectious processes, tuberculosis among them. While I can understand that a latent tuberculosis, that is, one giving rise to no marked symptoms, may be the starting point of a more acute inflammation, I insist, on the other hand, that a tubercular pleurisy may itself be a secondary condition grafted on a pleuritic inflammation non-tubercular in the beginning. It may be that all pleurisies tend to become tubercular. I am very sure that in many cases faults of nutrition leading to a general weakened resistance and the production of special irritants and depressants of cell activity and resistance are more fundamental as factors in causation than the infection itself. Equally certain am I that therapeutic measures addressed to the correction of these faults of nutrition, enabling the organism to fight its own battles successfully are more fundamentally indicated, more rational and more successful than are attempts to poison the germs directly.

Dr. Reynolds.—If 16% of all the men die from tuberculosis, it must enlarge the per cent. very much, and basing our result from that, a great many people would have tuberculosis complicated by pleurisy, but I cannot see why we cannot have pleurisy from uric acid diathesis, or following typhoid fever or pneumonia, or any chronic debilitating disease, and barring the people who already have tuberculosis, and to put it down in an equal footing, it does not

seem to me it would be such a great per cent. of pleurisy complicated by tuberculosis. I remember a case which came under my observation this summer a year ago, a chronic case of pleurisy with effusion. As soon as the fluid was removed the patient recovered. The lungs, which were supposed to have been consolidated, were entirely clear, and the patient, who has lost fifty pounds, regained her health, and has been well ever since. There is no history of tuberculosis and with repeated examinations from the sputum and even from the pleural cavity there were no tubercular bacilli found.

Dr. Sawyer.—I hold with Dr. Peavy. I had not seen that in any text-books, but he expressed my thoughts exactly, and they recall some three cases I had a short time since, which convinces me that they were uric acid and not tubercular. I expect 85 or 90% of my cases have been tubercular. I have only seen two or three from pneumonia and two or three from dropsy. I remember one case that was acute. The man had to be tapped several times to keep it down. No tubercular bacilli were found, but he undoubtedly had tubercular history following grippé, and had tubercular bacilli in his sputum, but it cleared up after the effusion was withdrawn the last time, and when I saw him last he was getting along nicely. I believe uric acid does not protect from tuberculosis at all. If anything, it predisposes to it, and is very deleterious, to say the least. I know some physicians hold that all you have to do is to get the patient saturated with uric acid and he will get well. I do not hold that way on the subject.

Dr. Paquin.—I would like to ask Dr. Ambler if he classifies as pleurisy frequent pain in the chest, either with or without other disease. They are really not of the same character, although they sometimes pass as such.

Dr. Ambler.—There is very little I wish to add. I do not believe that I contended that all cases of pleurisy were tuberculous. This paper was written with an idea of bringing up the point that we should be more thorough in investigating the causes of those cases of pleurisy which we do not recognize at once as tuberculous. I agree with Dr. Millender in his opinion, that a physician engaged in a particular line of work is apt to look at things from his particular point of view, in other words he becomes biased in his opinions, but I fail to see wherein his point applies to this paper. I would like to ask Dr. Millender if his case of Empyæma, which he tapped, secured the life insurance policy for which

the doctor was examining him. I know that the best line of Life Insurance Companies would absolutely refuse to insure an applicant for any large sum if he had ever had pleurisy with effusion and in fact, they would refuse to insure him if he had had pleurisy without effusion.

Dr. Paquin has asked me if I regarded "shooting pains in the chest" as pleuritic. I certainly do not believe that all the pains our patients have in the chest are due to pleurisy. Before I would make a diagnosis of pleurisy I would expect to find either pleuritic friction, effusion or pleuritic thickening.

As some one has said in the discussion, the statistics of our dead-houses show that two out of three bodies of persons who have been killed and never known to have had tuberculosis, contain old tubercular lesions of the lungs, which have healed. Sommerbrodt, of Germany, claimed that he believed that the recognition of old tubercular lesions in a cadaver was simply one of detail, that is, if he should work up any given cadaver carefully enough he believed that old tubercular lesions would be found without exception. He also thought it was safe to go upon the theory that all cases of pleurisy were tubercular until the diagnosis had proved the same otherwise. I certainly believe that uric acid diathesis would predispose toward pleurisy. Any diseased condition which lowers the vitality predisposes toward infection.

As before stated, I do not believe that all cases of pleurisy are tuberculous, but I do believe that if you will follow up our pleurisy cases more carefully we will find that many of these cases are simply a manifestation of latent tuberculous disease and, moreover, I believe that we will be pursuing the proper course if we act on the assumption that all cases of pleurisy are tuberculous unless we prove to our satisfaction that they are not. Some one mentioned that a diagnosis could not be made until tubercle bacilli are found. It is plain to be seen that this statement was made by a gentleman who is not biased in his reasoning from a tuberculous point of view, otherwise, he would never have made such a statement. If we are going to wait for the presence of tubercle bacilli in the sputum before we have made a diagnosis of tuberculosis, we will fail in the treatment of this disease.

Dr. Reynolds.—I made an examination of the effusion that came out of the chest.

Dr. Ambler.—My point is this: If our patient is expectorating and develops pleurisy, and upon tapping him we fail to find tubercle bacilli in either the fluid which

comes from his pleura or in his sputum, we are not justified in making the statement that this is not a tuberculous pleurisy. Fortunately, there are means at hand by which we can clear up the diagnosis in such cases, but these were not taken up in this paper.

Remove the Special License Tax.*

By J. Beverly DeShazo, M.D., Ridge-way, Va.

Cicero said: "There is nothing in which men so approach the gods as when they try to give health to other men." In all past ages, the garland has been woven for the doctor's brow. The high and the low of every clime, from the very poorest beggar to the proudest ruler that wields the sceptre of earthly power, alike, vied with each other in songs of his praise, and paid homage to his sublime wisdom. It was not till this century that his name was excluded from a Hall of Immortal Fame, and the galling yoke of a special license tax was pressed down heaviest upon his profession, and worst, indeed and in truth, here in Virginia. I am aware this is a tabooed subject, but touch the currency question, and especially our pocket-book, and it becomes pardonable and extremely interesting.

For nearly a hundred years, our State legislators have upheld this law, and little by little increased it, till now we pay the highest license tax levied upon physicians anywhere in the United States. Indeed, with North Carolina and Georgia excepted, Virginia stands alone in this method of special taxation.

No State ever imposed a more unjust tax. It is self-evident that any law that singles us out as a class for a distinct tax without any exemption whatever from regular taxes, and gives nothing special to our profession in return, is gross and profound injustice.

We do get special privileges one proclaims. Yes. What are they? To neglect every other business interest; to stay the march of deadly epidemics; to work twenty-four hours, if demanded, seven days in the week, at the expense of body and soul (no wonder doctors have so little religion) sacrificing needed rest and recreation, braving wintry days and stormy nights, and—sad must I say it—not infrequently for thankless men. Compare this with what other classes of our citizens do, and mark the contrast. Any fair-minded judge

*Address delivered before the Medical Society of Virginia, at Charlottesville, Va., October 23rd, 1900.

would justly decide that a pension should be given us rather than an extra tax should be imposed.

It is, moreover, a burden the majority of physicians are not really able to bear. Very justly, it requires years of study, and a considerable outlay of capital, to fit one's self to begin practice. In return for the investment, considering the physical and mental labor required, the pay of the general practitioner is the least of any honorable profession followed by mankind. As positive proof of this, feel in your own pockets, or look around and notice how few rich ones you see, and recall how few lawsuits were ever instituted for a deceased doctor's estate, for it usually consists of kind words and "professional services rendered."

Undoubtedly, it is a real hardship upon at least fifty per cent. of the profession of our State, but the average old physician, still proud as a prince, so accustomed is he to appear to be doing well, that he fears to speak against it, because somebody might think he is hard up financially.

It is hardest upon the young ones, and especially hard upon those who rarely attend our meetings. These have not the surplus means to bring them every year, and when, luckily, the society meets near them, they, too, to keep up the air of royal splendor, sit like mummies and consequently their plaintiff wails are never heard.

Finally, when we look after public sanitation with its manifold blessings; when we make self-supporting citizens of diseased and deformed paupers; when we increase the average of human existence by preventative and curative treatment; and, when we rob the most loathsome diseases of their terrors, should not the State in return, at least, exempt us from this unjust oppression?

WHY THE LAW REMAINS.

By reviewing the history of the law, we readily see why it has been enforced so long, and why borne so patiently. At first it was only a nominal tax, just enough to establish the principle, but gradually it was increased at one per centum till it was five dollars more. Again, the law was revised with five dollars added to the original with the one per centum, and so on it climbed, till the last leap brought it to its present high-water mark. As an irritable stomach will not retain drugs in large doses, and they must be increased gradually, so our legislators, profiting by this same law of toleration, have treated us most scientifically, and hence the law, cultivated diligently by the delicate touch of skilled politicians, came

down to us with many other evils of this century.

Our older members being wealthier, grew up with the idea that it was one of the burdens attached to the profession, and accepted it uncomplainingly; and, too, a false doctrine has been disseminated that the ideal of a physician's life should be to go without thinking of financial reward, wherever called, surrounded by a great halo of glory—not unlike a god—that for him to rebel against such a worldly matter as city or State taxes, if it was not really unprofessional, it was decidedly beneath the dignity and grandeur of the profession. From the standpoint of business, justice and reason, when we think how this idea of fame has been abused, and this evil of taxation has been tolerated so long, we must confess we present the most pitiable illustration of impotence that stands before the intellectual public representing any vocation.

DUTY TO OURSELVES AND STATE.

In these days when great combinations force the price of the necessities of life up at the bidding of greedy individuals, when books, instruments, and everything we require in practice, are not exempt from this evil of trade oppression; and, on the other hand, crowding, contract practice, and the obliging dispensary, are nibbling at the other end of our revenues, is it not high time, and our duty to ourselves and our posterity to stop this species of legalized robbery?

One may say, it is a duty we owe the State, but for what special consideration we search in vain. Are other taxes levied at a less rate than on other citizens? Is the fifty cent witness fee, or two dollar and a half for examining a lunatic, and a proportional fee for making a post-mortem examination, such bountiful blessings from the State that we should pay extra for them?

Homer said:

"A wise physician,
Skilled, our wounds to heal,
Is more than armies to the public weal!"

In addition, recall what our profession has done for the commonwealth. A State board of health with its innumerable blessings has been established, stringent laws against quackery have been enacted, and our State board of medical examiners has elevated the standing of young physicians from a stage of experiment, altogether, giving greater security to the public, and additional honor to every practitioner in the State.

OTHER STATES REPEALED SUCH LAWS.

The profession has been similarly taxed in other States, but by the united action of

the physicians, such laws have been repealed. The doctors of Alabama rose in their might, and freed themselves more than twenty years ago. In 1888 Mississippi imposed a license tax on the profession, but in 1890 it was repealed. How? Not by the mild request of a few physicians, nor was it done by an obliging legislature while the doctors practiced along attending to everybody except themselves, but the State Medical Association with all its resources took command, armed its members with petitions, and a canvass was ordered. With these petitions some of the best political fighters marched into the capitol, a terrific battle of the platform was fought, and since that day not a vestige of the law has oppressed the physicians of Mississippi.

HOW TO REPEAL IT.

This Society should state its grievances, and by a proper resolution appeal to our law-making assemblies for relief from this odious measure.

At last year's meeting of the Mississippi Medical Association, Dr. C. Kendrick, president, speaking of the work accomplished by their Association, said: "But for the action of this body, it is quite probable the Legislature of 1890 never would have repealed the \$10 tax on physicians. The friends of the Association used these resolutions by the Association as a powerful weapon in the fight for the repeal of the law." Can we not profit by the successful methods employed by other societies? The facts are, a little practical political work must be done by our members, and for our relief, it is imperative. We must see our legislators at home. His disease is only mental now, and before he gets his body and raiment contaminated with the political air of Richmond, he can be treated successfully. If we can make the first impressions, and obtain his promise to aid us before the election, or before he leaves home, so much the better, our victory will be half won before the battle has been ordered.

In a speech before the New York Medical Society, Lieutenant-Governor Woodruff of New York said: "The medical profession should endeavor to draw near the executive and legislator. Much that the profession needs could be easily gained if the physicians of the State exercised that tact and energy displayed by politicians." Since it is by a political act we expect relief, why not heed the advice and study the ways of politicians? We can easily get the names of our personal friends to petitions asking for the repeal of the law. These will strengthen our law-making friends, and soothe the political fears of others into a

hypnotic condition that will guarantee help in the fight, or else they will be very careful in their opposition. With a few lobbyist in the corridors, and several fluent expert debaters on the capitol floors, the law can be repealed; but if we do not train each legislator up to his duty, and fortify him with proper resolutions and petition, this law will remain to curse us till time shall be no more.

If we allow this injustice to continue, when there is no limit to taxes but toleration, and our toleration amounts to supine indifference, what will be the final limit? So far, to every call for higher taxes, the physician, though conscious of the injustice of it, have pleaded guilty to the demand by meekly paying them. Is this not a pitiful picture reflected from the inaction of the brightest brains of man?

Year in and year out, we toil on in this great work for humanity, apparently blind to our own needs, and deaf to everything but duty to others. We let our finances take care of themselves at the expense of our dearest loved ones. We are truly the world's best friends. We stand at the gates of life as man enters the world, and at the gates of death when he goes out of it.

Through all of our professional careers, we share in, and minister to the suffering of men, and the pain and woes of precious women. Daily we give ease, hope, and comfort without price, yet our cup of joy is never filled. We see the cruel burdens of maternity, the wretched sorrows of lust, the mutilated beauty of mothers, [the withered buds of divine infancy, and souls sink low and ever lower in the great ebb of life. We hear pitiful appeals for help from hunger pains, from the pinched face of want, but not in vain. "We see the white rag of pleading truce on cheeks where scarlet flags of health should challenge the hosts of heaven or the hoards of hell." From innocent lips that should render the sweetest music of the universe, we hear the piercing shrieks of agony, mingled with the quivering wings of departing hope, and the anguish of despairing mothore as the angel of death hovers near in victory.

Such is the life of every true physician, from proudest and happiest commencement to those halcyon days "beyond the smiling and the weeping." Then, in the name of justice, reason, and heaven, is it rich to reward his honorable life-work, not with a crown of roses, but with a burden of iniquitous taxation? Can we not be aroused up to our duty to ourselves, and to the sacred rightsof our profession, and profit by the experience of Alabama and Mississippi, and take proud Virginia from the

hindmost ranks, and make her in the medical as in the historical world, the brightest star in the constellation of States? May this work never go backwards, or tarry for a moment, but continue onward and forward,

‘Like to the Pontic sea
Whose icy current and compulsive course
Ne’er feels retiring ebb,
But keeps due on to the Propontic and the Hellespont.’

Early Diagnosis of Pulmonary Tuberculosis.

By A. A. Young, M.D., Newark. N. Y.

Pulmonary tuberculosis being so common, its effects so widespread and its treatment so unsatisfactory, especially in the latter stages, it behooves the physician ever to be on the alert in order to detect the earlier manifestations of the disease, for during this period of development only can the physician hope by well directed efforts and agencies to stay its ravages or cure the malady.

The beginning of the disease is so insidious as to often be unobserved by both the sufferer and his friends. And many times the disease may be well advanced before its presence even be surmised by the casual observer, be he friend or physician.

It behooves us as practitioners to beware and never take the patient's oft repeated diagnosis, "Doctor, I have just taken a little cold somehow and I cough a little but don't raise much, I just want a little cough medicine." It is the old story, but a story with a meaning—a meaning which can be understood only after a careful study of the minutæ. The classification and comparison of all the signs and symptoms must be minutely studied—for a treatment founded upon diagnostic errors, especially in this disease, cannot fail to produce irreparable mischief. Unobstructed bacilli development goes on and on with its consequent, the destruction of the infected tissue.

The indications are that if pulmonary tuberculosis becomes a *curable* disease it must be sought for along the line of devitalization and elimination of specific bacilli; a result that can be reached only by prompt and early treatment.

Of the earlier indications of pulmonary tuberculosis we may mention slight emaciation without apparent cause and the consequent loss of strength; accompanying this emaciation and loss of strength anemia becomes noticeable but not marked.

In a typical case cough may be present

but composed of a short, dry hack, accompanied by little or no expectoration. This characteristic cough, so slight, usually causes no alarm, or even excites suspicion. This "little cough," which is not a disease, goes on unobserved, uncared for, unless casually some sedative *cough* mixture be prescribed like codein or heroin, agents that stop the *cough* but lock up the excretions, and by so doing the pathological processes are increased and a new infection is taken on.

The variations in temperature for diagnostic purposes are valuable. It will be noted that the temperature in the early stages of the disease may be subnormal during the early morning hours and scarcely if ever above the normal at this time; but there comes a slow and steady increase in temperature, reaching its maximum at about 2 P. M. each day, when it recedes for a time only to rise again. This temperature curve shows plainly that there is a periodicity in the development of tuberculosis—a periodicity so regular that great reliance can be placed upon it for diagnostic purposes.

This phenomenon of temperature is the father of a surmise that the so-called pulmonary tuberculosis is primarily a systemic affection and not an affection of the lung, though within the lung tissue destructive changes macroscopically occur.

This peculiar temperature curve is a most important diagnostic sign of tuberculosis in its incipency and should never be overlooked; it stands as one of the first elements on which to base a correct diagnosis.

It has also been observed that the temperature taken in the axilla is higher than that taken by the mouth, quite the reverse as found in other febrile disturbances; in one case somewhat well advanced, a difference of one and one-fifth degree was noted; this observation was carefully made and repeated for verification with the same result. Further observation, however, is necessary to determine whether this phenomenon be the rule or not. In a few isolated and well advanced cases this condition was found to exist.

Auscultation may reveal but little. The abnormal sounds in uncomplicated incipient tuberculosis are almost inaudible, and requires a well trained and most correct ear to detect and differentiate them from other normal or abnormal sounds. These sounds are at first feeble and localized, covering an area oftentimes of not more than one or two inches in diameter over which the ear, even aided by the stethoscope can detect them. To cover the chest at every available point requires careful and painstaking work,

more I fear than the physician ordinarily insists upon.

A few of the auscultory signs may here be given. The inspiratory murmur is less soft, slightly roughened, and at the close of inspiration there are often heard fine moist rales. During the progress of inspiration the inspiratory murmur becomes often arrhythmic, which is usually divided into three portions and resembles a mild blowing sound. I have come to regard this sign, when present, as a most important one in differential diagnosis.

The expiratory act varies but little from the normal, save a slight lengthening of it, similar to that of fatigue after exertion, while the murmur is somewhat increased in force above the normal; at times there may be a slight blowing sound induced by the presence of a colony of specific bacilli which produce by irritation, or mechanically, a stricture in the invaded bronchus.

Another test, and one on which most reliance can be placed by the physician, is the "microscopic test." I use the qualifying term microscopic intentionally, for it is susceptible of broader meaning than bacteriological. Not every physician is prepared and equipped for the search and positive discovery of bacilli within the sputum; time as well as ability may cut off many; this work should be given to the professional microscopist, for accuracy's sake; but the ordinary physician, equipped with only an ordinary microscope, may search for and discover elements within the sputum that furnish nearly as conclusive evidence of tuberculosis as the bacilli themselves. The spirals, the leucocytes, the disintegrating tissues, etc., require no high power objective nor a skilled observer for their detection; they can be easily seen and recognized and differentiated by the novice, and only in special cases that are most obscure are the services of an expert positively required.

Even the testimony of the microscope, correct as it may be, when isolated becomes questionable. We can easily conceive of conditions in which the bacilli may be found within the sputum as other excretions of the body, and yet their possessor may not be infected with tuberculosis. Deposition without germ development has only taken place; this condition is a mechanical and not a vital phenomenon.

Without the specific germ development, there can be no tubercular disease, even though the microscope may detect the presence of bacilli. On the other hand negative microscopic results do not mean the absence of tuberculosis, there may be still

a latent tubercular focus, the beginning of the disease, the early knowledge of which is all important.

Letters, meaningless things, when properly combined make words; words, meaningless things, when properly combined and arranged, make an intelligent language. So no sign or symptom should ever be relied upon for diagnostic purposes, for signs and symptoms individualized are meaningless things, they are only the letters or words which must be arranged and combined in proper form and without which arrangement and combination they are comparatively valueless and convey at best but very imperfect information. 'Tis the prattle of a child.

Bearing in mind then the *constant* peculiarities of a typical case of tuberculosis, and the investigator having the necessary or desirable apparatus for diagnostic purposes, which every physician can own and intelligently use; and comparing the conditions found existing in the suspected person with those conditions known and acknowledged to be common to, and existing in every consumptive, diagnostic errors should be rare, especially if the disease be in its active stage, though in its incipency. Like changes must produce like results—results that must be commensurate with the activity and extent of the pathological changes.

To diagnose latent tuberculosis, an affection in which there are tubercular foci containing non-developing bacilli is most difficult, for in this quiescent state there is almost an entire absence of all the objective indications of this malady.

It is during this period the most satisfactory results are obtainable, and by proper and early treatment many may be saved from untimely graves.

In afebrile or latent tuberculosis, as a diagnostic agent tuberculin promises much. If its action be as alleged, to produce an elevation of temperature in affected subjects, while in those persons free from tubercular taint there are no appreciable changes, then we have a most potent agent for the detection of a most fatal malady, while it is yet amenable to treatment.

Tuberculin is, however, in its experimental stage, but judging from reports published by experimenters it is worthy of further experimentation.

By combining all of the methods and agencies mentioned for diagnostic purposes, one can scarcely commit an error the conclusion reached must be reasonably sure and certain; we can then affirm with all confidence, at the very earliest moment, that

abnormal conditions can be discerned, tuberculosis or no tuberculosis.

22 East Miller St.

Cerebro-Spinal Meningitis.*

By Wm. J. Crittenden, M.D., Unionville, Virginia.

In the presentation of this paper, I don't know that I shall present a single new idea, that I shall introduce a single suggestive thought, that I shall make an utterance which will make an imprint or impress on your minds, but my main object in introducing this paper is to elicit a discussion which will reveal some of the hitherto hidden points in the treatment of this malady, which will make more homes happy and fewer hearthstones desolate.

HISTORY.

Vague rumors were afloat of it during the 15th and 16th Centuries, but the first authentic account of it was published by Vissieux, of Germany, in 1805.

It prevailed in Massachusetts in 1806, in Philadelphia in 1863, in New York City in 1871-72, in Canada, in the valleys, along the windings of the rivers, as well as the meanderings of the smaller streams, in 1873.

Since that time its prevalence as an epidemic has not been so marked.

PREVALENCE.

Sporadically, endemically, epidemically, and pandemically. It is seen most often during the winter and spring months, affecting both sexes alike, and a marked preference for children, though epidemics do occur in which only adults are affected.

CAUSES.

The specific cause is the micrococcus lanceolatus.

HABITAT.

In temperate climates and the northern parts of temperate climates, in crowded tenement houses, among soldiers in barracks, whose vitality has been lowered by long marches and active campaigns.

During the present year I have seen it among negroes who were overcrowded, underfed, and exposed to all the vitiating influences of life.

PATHOLOGY.

It is an inflammatory affection of the membranes of the brain and spinal cord, with its attendants, effusions, organization,

and, perhaps, suppuration; not only affecting the membranes, but producing softening of the brain, effusion into the ventricles of the brain, suppuration of the ear, of the eye, affecting the organs of special sense, viz., sight and hearing.

It has been found as we go down the spinal cord that this organization increases, both in quantity and its cheesy quality, thus producing pressure.

COMPLICATIONS.

Pneumonitis, pleuritis, bronchitis, pericarditis, endocarditis, effusion into the cavities of the joints, &c.

Therefore, with this wide pathological range, we may expect every variety of clinical symptoms to which human flesh is heir.

SYMPTOMS.

Usually between noon and midnight it commences with a distinct chill, followed by high fever, quick pulse, quick respiration, intense pain in the head, eyes and photophobia, pain in neck and back, and in the cervical and lumbar regions—with stiffness in neck and back—with great pain on movement, often so intense that it causes the patient to cry aloud.

Pupils are usually contracted at first and later on become dilated or irregular; the tongue is coated, at first light, then it becomes heavy.

Nausea and vomiting often make their appearance very early in the disease, bowels are constipated and abdomen retracted; later on in the disease it often becomes puffed and diarrhea makes its appearance, the stools often becoming involuntary.

The skin is intensely hyperæsthetic, and from time to time, varying with the date of the disease, from small eruptions to mottling of the skin, may be seen the spotting to which so much importance is often attributed.

Every spinal nerve in the body may be affected, both in sensation and motion.

I have often seen patients who presented each day an entire new set of symptoms.

The motor symptoms are well marked; the head is retracted—in some cases I have seen the patient almost rest on the head and heels—the hand is flexed on the forearm, the forearm on the arm, the leg flexed on the thigh, and the thigh on the pelvis.

In some cases I have seen the most intense pain in the stomach.

In some cases we have few symptoms, the patient is taken and dies from profound toxæmia, or he may be taken with headache, languor, general and great depression, general malaise, pain in head, neck and back and great stiffness.

*Read before the Rappahannock Valley Medical Society.

In children, in place of the chill, we often have a convulsion.

Contraction of the internal and external muscles of the eye are often seen.

The following is a case which came under my observation: August 12th, 1894, Mrs. C., aged 26, was taken about noon with a severe chill, high fever, quick pulse, and great pain in head, neck and back, retraction of head and contraction of all the flexor tendons of the limbs, stiffness of neck and carpo-pedal spasm. Recovery.

March 21st, 1900, Mrs. C. was again taken but more seriously in every respect, and at times it seemed that the respiratory center would be overwhelmed and the patient would die from asphyxia.

The internal respiratory nerve, as well as the external respiratory nerve of Bell showed decided signs of compression.

One significant symptom in this case was that my patient would show decided signs of improvement and seemed to be on the road to recovery, when all at once, she would go back to where she started, and at times she would show decided signs of *angina pectoris*,

April 10th, 1892, I was hastily called to see Shay C.; found him suffering with convulsions, with that peculiar cry, so peculiar to this malady, with retraction of head and contraction of flexors of arms and legs.

This case dragged on for four months, at the end of which time I found the head enormously distended—flexion of arms and legs, with all the joints of the body enormously distended.

This case gradually got better, but left him deaf and dumb.

In July of this year, an epidemic occurred among negroes, the salient points of which were chill, high fever, great pain, vomiting, retraction of head, &c., inability to stand, early delirium, and permanent lunacy in one case, and in two cases I noted trismus.

Following in the wake of typhoid fever, I find it a most dangerous complication.

In an epidemic of pneumonia several years ago, I found it complicated with cerebro-spinal meningitis.

Be it a primary or secondary trouble it will always be a grave one.

Occurring, as it often does, both as a primary trouble and as the sequel of many diseases, it will be found to be a disease whose mortality ranges from 20 to 80 per cent.

DIAGNOSIS.

By attention to its symptoms and to the fact that it often prevails as an epidemic, and too that it is communicable from man to the lower animals, and *vice versa*, will

often shed much light and render our diagnosis available.

TREATMENT.

Seven points must be kept steadily in mind, viz.: (1) Rest—both mental and physical. (2) Freedom from pain. (3) Absorption of effusion. (4) Stimulation. (5) Tonic treatment and treatment to prevent paralytic troubles. (6) Local treatment. (7) Supporting.

1. The patient should be put to bed in a dark, airy room, the bowels thoroughly emptied by means of a mercurial purge, followed by a saline; the hair cut close, preferably shaven, an ice cap to the scalp and one along the spine, and, if any contra-indication, the use of heat.

Pain should be relieved at once, and the brain put at rest; for this purpose no remedy is so potent for good as morphine in sufficient doses to produce quiet and sleep, and then chloral, grs. x, and sodii bromidum, grs. xxx, every three hours. If this fails to produce the requisite sleep and quiet, recourse should again be had to morphia.

I have found codeine to fill a fairly good indication, but not so good as morphia.

I have also found hyoscyamus to relieve restlessness very much.

2. Freedom from pain should at all times be enjoined. I have found after the acute attacks are over, grs. xxx, sodii bromidum to relieve pain and nervousness to a marked degree.

3. Absorption of effusion. I have never had occasion to desert my first love, viz.: Pot. iodidum in saturated solution, starting with grs. x and gradually increasing to grs. xxx three times per diem. In the late stages 1-30 gr. hyd. chlor. corros three times per diem until tenderness of the gums is produced.

I often find good results by alternating iodide potash with iodide of lithia.

4. During all this period it is necessary often to stimulate the patient.

For spells of weakness I give ammonia for its immediate effects, and I often find it necessary to use whiskey to sustain the flagging vital powers.

5. To prevent paralytic troubles I know of no remedy comparable to strychnia—acting as a general tonic—toning up the digestive organs, and also preventing paralytic troubles, as well as acting on the nerves of special sense.

6. Local treatment is of much avail—the ice bag I have spoken of, during the early stages—later on I formerly used blisters. I have discarded them and now use the thermo-cautery.

While I think in some cases blisters do good, but they produce a great deal of discomfort and aggravate the patient, often producing stranguery. The thermo-cautery fills all the indications of a blister without any of the evil effects.

The question of lumbar puncture has a bright future, thus relieving the pressure on the cord which would otherwise take a long time, if not producing baneful effects on the brain and cord.

7. At all times nourishment should be administered regularly; first, a nutritious liquid diet, and, as convalescence sets in, a good substantial diet, easily digestible.

If the weather be cool Ol Morrhuæ acts well as a general alterative and tonic.

Finally, after all these things are done, we bury many of our patients.

Pernicious Malaria in Infants.*

By John Zahorsky, M.D., Clinical Lecturer on Diseases of Children Washington University Medical Department, St. Louis.

The descriptions of pernicious malaria, as it occurs in infants, are exceedingly meagre in detail in our text-books on pediatrics. This is probably accounted for by the fact that the authors practice in a part of the country where malaria does not prevail extensively. It was with great interest, therefore, that I read the exhaustive study published by Moncorvo, of Rio Janeiro (Pediatrics, 1899). But I could not harmonize my own experience with some of the clinical pictures which he painted; and I was bold enough to express an opinion against some of his types really being due to malarial infection. (Courier of Med.) I asserted that in the absence of a blood examination some of the pictures presented by him would invariably be classed among the gastro-enteric infections.

To quote from the article of Moncorvo: "The abdomen is more or less swollen, the evacuations become flocculent, greenish, or serous. * * * In older children the diarrhœa is apt to assume the form of dysentery. The stools are muco-purulent, more or less mixed with blood and followed at times by tenesmus."

In another place he draws a clinical picture which would invariably be diagnosed cholera-infantum. Moncorvo, furthermore, called attention to the great mortality of infants infected with malaria. In the last five years I did not remember but one infant that died of this disease, although my hospital and dispensary practice had

been quite extensive. The only dangerous type which I knew prevailed in this climate was the acute hyperpyrexial form, which is characterized by some vomiting and convulsions. But these are usually readily controlled by hydro-therapy and quinine.

But with this warning I determined to be alert. St. Louis belongs to the larger cities which offers in its suburban ponds and lakes a good breeding place for the anopheles. Consequently during July, August and September malarial infection is rather common. During this time also the various forms of gastro-enteric infection are widespread.

The following cases which occurred under my observation this summer very forcibly illustrated that Moncorvo's picture was not over-drawn:

CASE 1. R. H. male, six months old, an inmate of the Bethesda Foundlings' Home since birth, had been a healthy child. In February, 1900, was attacked by epidemic influenza. In May he had a mild gastro-enteric infection. The boy was well nourished and his skeleton well formed. On August 5th he seemed very well in the morning, but in the afternoon he became suddenly cold and cyanotic. He vomited several times. He remained cold in spite of stimulants for several hours. His rectal temperature six hours from the onset of alidity was 101 degrees.

Aug. 6. The morning temperature was 98.4; in the evening it was 103.4. Five, thin, watery, greenish stools were passed during the day. He cried for one hour. Bad peripheral circulation was apparent, vomited several times. Nothing was found in the chest. The diagnosis made was gastro-intestinal infection. Dr. Levy, who had charge of the patient, ordered enteroclysis, stimulants and a diet of rice water.

Aug. 7. The temperature remained uniformly about 101.4 all day. Pulse was feeble and rapid, skin cool. The diarrhœa and vomiting persisted. The patient was saporific all day, and would not take his food. He had to be forcibly fed. No disease was found in throat or lungs. I saw the patient in the evening and obtained a specimen of blood. Examination of the cover glasses revealed an enormous number of plasmodia malaria present and an absence of leucocytosis. I was unable to determine for a certainty whether the plasmodia present were the tertian or quotidian type of the æstivo-autumnal fevers as named by Marchiafava Bignami and Manneberg. Dr. Fisch, who also kindly examined the specimens, thought the hematozoa present to be the ordinary tertian form of intermittent fever.

Aug. 8. Quinine sulphate was ordered. Two grains were given every two hours by the mouth. The morning temperature was 100, the evening 103. The patient vomited all the quinine and was completely comatose towards evening. Death ensued early in the morning of August the 9th. The autopsy revealed nothing startling. The liver and spleen were swollen, the brain was moist and congested. Otherwise nothing abnormal was found.

CASE II. The patient was a male infant aged 11 months, which I saw in consultation. A complete history was not obtainable. The infant, who was a strong, well-nourished boy, had been sick for about two weeks with diarrhœa. It was given malted milk by the attending physician, when suddenly the stools became very watery and frequent. The temperature rose to 105 deg. Another physician was called who placed the infant on whey and stimulants. The infant grew rapidly worse and three days after the onset of the high fever I first saw the patient. The infant lay quiet in a semi-comatose state. The skin had a pronounced yellowish-white hue. The eyelids were partly separated, and a film covered the cornea. The eyeballs appeared sunken into the orbit. The eyelids did not wink. The pupil reacted very slightly to light. The extremities were cold and the fontanelle depressed. The temperature was 102.5, the pulse about 160, but feeble and irregular. The diarrhœa had persisted. The stools were thin and dark; yellow in color. They gave a strong but not a very offensive odor. The consistency was smooth. The microscopical examination of the stool, stained by the Weigert-Escherich method, showed a large number of the bacilli acidophili, but no streptococci. A very few epithelial cells and white blood corpuscles were found.

The examination of the blood revealed an enormous number of tertian plasmodia malaria. Hypodermic injections of quinine proved futile and the infant died a few hours later.

In studying the history of these two cases the question arises, What symptom might suggest that malaria is present. In the first case the algidity at the onset is very suggestive. Chills do not occur in the course of gastro-enteric infection. But the algid stage of cholera-infantum might be mistaken for it. Cholera-infantum and malaria are thus very readily mistaken, one for the other.

In the second case the sudden high temperature in the course of a summer diarrhœa pointed to something more than intestinal infection. But during the heat of

the summer it is difficult to exclude thermic fever, which is very common during the course of such diseases in this city.

The only safe rule is to examine the blood in all forms occurring during the summer. To illustrate the difficulties encountered in treatment even in successful cases the following is worthy of record:

CASE III. W. B., male, aged 3 months, was taken with an irregular fever in July. The baby was treated for malaria by some neighboring physician for two weeks, but only temporary improvement occurred. I saw the patient about the first of August. The baby was breast-fed, well nourished, and had a temperature of 102 deg. The liver and spleen were enlarged, but no diarrhœa and little vomiting was present. A painstaking examination revealed no infection in any of the organs. The blood contained many plasmodia and no leucocytosis. The infant was put on quinine and sulphuric acid in full doses. On the following day the mother reported that the baby had a good night. But on the second night the temperature rose to 105 deg. and the infant was on the verge of convulsions. Hydrotherapy was then instituted, and a hypodermic injection of quinine hydrochlorate with urea was given. The quantity injected was three grains dissolved in one and one-half cubic centimeters of water. Twitching of the right hand and some strabismus induced me to make another blood examination, but as no hyperleucocytosis was present, the fear of meningitis was dismissed. Quinine was increased, two grains every hour were given. But the infant vomited at times. On the following night the temperature was found to be 106. A full bath was given and the fever reduced. Rigidity and twitching of the right arm, and rolling of the eyes again suggested the advent of a convulsion.

At this time five grains of quinine hydrochlorate with urea were administered hypodermically. An hour later the infant had an eclamptic seizure. The following day two hypodermics of the same salt were injected. On the third day improvement commenced, but a daily injection of about four grains of the quinine was continued for several days. Quinine sulphate, arsenious acid and sulphuric acid were given by the mouth. Calomel had twice been given in purgative doses. The fever continued in a mild form for ten days longer. The injections were made in the subcutaneous tissue of the thighs. It has been recommended that the drug in solution be injected deep into the muscles, but by using aseptic precautions I believed I should avoid abscesses. But I was mistaken. Every point of

injection became indurated and small abscesses formed.

My technique was as follows: The hypodermic syringe was put in a hot lysol solution for several minutes and the barrel thoroughly washed out. The water for dissolving the drug was boiled and cooled. The required quantity of the quinine was placed in a clean spoon and one and one-half cubic centimeter of the water added. This was then heated to boiling point. Still abscesses developed and all had to be opened. I made a culture on glycerin agar by smearing some of the pus on the surface. No growth appeared after two days in the incubator. The pus then was caused by the concentrated solution of the quinine.

In the future I shall use the neutral quinine hydrochlorate, and dissolve it in more water, so that the solution is weak. I shall also inject it into the muscles. In this way I hope to avoid chemical abscesses.

1460 Grand Av.

Drainage in Abdominal Surgery.*

By J. W. Long, M.D., Salisbury, N. C.,
Emeritus Professor Diseases Women and Children Medical
College of Virginia.

Many of the problems involved in abdominal surgery have been settled, not always in the same way by different men, it is true, but by a general consensus of opinion, the outcome of our gradually accumulated knowledge, many of the procedures practised in abdominal surgery have been agreed upon. (See Standard, December).

For instance, every surgeon agrees and insists that his hands, instruments, the field of operation, etc., must be clean, surgically clean; and it doesn't differ whether a man believed in "bugs" or not, he says "you must be clean"; nor does it matter whether he scrubs his hands till the superficial epithelium slips, dyes them and bleaches them in strong chemicals, or merely scrubs his hands and rinses them in alcohol, still he emphasizes that you must be clean. Not only is cleanliness next to godliness in surgery, it is godliness itself.

While some surgeons make a short abdominal incision and some make a long incision, all agree that the incision should be sufficiently ample to allow the operator to work easily and expeditiously.

While some surgeons employ silk ligatures and sutures within the abdomen, and

others use catgut; some steam their silk fractionally, others boiled it one time only, still others do both; some sterilize their catgut by dry heat, others cumolize it; yet all maintain that whatever material is employed and by whatever process it is prepared, it must be absolutely sterile, non-irritating, easily absorbed, and the smallest size commensurate with safety.

We all agree that loss of blood is the chief factor in the production of surgical shock.

I dare not include in this category of agreements the various methods of closing the abdominal incision, for if the gentlemen who practise the different methods of closing the abdomen were to suddenly agree, we might be forced to draw the same inference that the new waiter did at the medical banquet. You have all heard that story. After several courses had been served, the new waiter said to the old waiter, "I believe these Doctors are getting drunk." The old waiter said, "I don't see any signs of it." The new waiter replied, "I don't either except that they are beginning to agree with each other."

Touching many other points there is a general consensus of opinion, why we can not settle upon some well defined principles in the matter of abdominal drainage. To this end I have invited the attention of this distinguished body. Ever since Robert Houston, in 1701, incised the abdomen of Margaret Millar and left a "small tent in the lower angle of the wound," drainage has been considered a question of prime importance in abdominal surgery. Indeed, incision and drainage were about all that surgeons dared to do till the immortal McDowell deliberately removed a tumor from Mrs. Crawford in 1809.

That drainage is essential and desirable in some cases is evident; that it is unnecessary and undesirable in many cases is equally clear. Let us then consider briefly the *objects of drainage*.

The chief purposes for which drainage is employed are as follows:

1. To drain away existing septic material.
2. To afford an exit for the sepsis when the operator fears he has possibly infected his patient.
3. To provoke adhesions and thereby wall off weak spots from the remainder of the abdominal contents.
4. To keep the peritoneal cavity free of blood and other fluids.
5. To allow of a more certain knowledge of the conditions present in the abdomen.

*Read before the Southern Surgical and Gynecological Association, at Atlanta, Nov. 13th, 1900.

6. Gauze drains are sometimes employed as tampons to control hemorrhage.

1. *To drain any septic material.* There can be no question of the propriety of drainage in those cases where sepsis is already present. Its value has been emphasized many times in cases of suppurating appendicitis which may be taken as typical of septic cases. But it is to be noted when we come to apply this rule of action to other cases presumed to be already septic that the surgeon, who does not follow a routine, formerly drained many cases that he now feels safe in closing without drainage. By way of illustration, take the following recent case occurring in the hands of the writer:

Mrs. S., a very small woman, age 23, white, delivered 48 hours before she was seen by the writer of an average sized child, condition only fair, pulse 120, temperature 101 deg., emaciated, abdomen greatly distended with an ovary cyst. A few days' delay was advised. After ten days abdominal distension was increasing, respiration was beginning to be embarrassed. Contrary to the writer's usual custom he tapped the abdomen, drawing off thirty pints of heavy gelatinous fluid. This relieved the dyspnea, but the evidences of sepsis continued. After a few days the patient having gained a little strength, she was taken to more comfortable quarters and the tumor removed. The tumor when removed weighed thirty-three pounds, which added to the thirty pounds removed at the tapping a few days previously made sixty-three pounds. The tumor and pregnant uterus probably weighed as much as the woman. The cyst was multilocular, containing many different kinds of fluid. Adhesions were numerous and evidences of widely-spread peritonitis were present. Because of the rottenness of the cyst wall a quantity of the fluid escaped into the abdominal cavity. The abdomen was thoroughly washed out and left filled with salt solution and the incision closed without drainage. The recovery was perfect. Formerly it would have been considered necessary to drain this case because of the sepsis and peritonitis.

Nor is it necessary to always drain after removal of pustules even when the sac ruptures and the parts are bathed in pus, since it is well known that pus is frequently free from pathogenic germs. This is especially true in old abscesses. Even the presence of some forms of pathogenic germs, noticeable the gonococci, is not an indication for drainage. The principle of drainage in septic cases is decidedly applicable when we invade the peritoneum through the vagina. Indeed, in these cases, as in suppurating appendi-

citis, the chief object is to drain the pus foci and serum distended tissues. Here we have ideal drainage, for gravity aids capillarity, and it is oftentimes marvelous how quickly these patients recover.

2. *When the operator infects his patient.* After the earlier operators got over their dread of opening the peritoneum, surgeons gradually learned that mere opening the peritoneum was a perfectly safe procedure, provided the operator's hands and impliments were sterile. In this day it is almost inexcusable for a surgeon to infect his patient, yet almost all of us say, "if we handle the parts a great deal it is better to drain"; unmindful of the fact that we are virtually admitting that we have probably infected our patient. With instruments, sutures and sponges thoroughly sterile, with our hands conscientiously scrubbed, washed in chemicals and the use of rubber gloves, prolonged handling of the parts ought not to be an indication for drainage.

However, the unexpected occasionally happens. Last month while the writer was doing an hysterectomy in a private house in a distant city the patient suddenly stopped breathing, and she looked like all the blood in her body had suddenly sidetracked itself into the capillaries and was determined to stay there. It required prolonged efforts at artificial respiration with the patient in the inverted position to establish the respiratory function. But for the intelligent faithful efforts of professional friends the patient must have died. The writer was kept busy trying to protect the open abdomen. Of course chloroform was the anæsthetic being used. A friend of mine had just lost a patient from the same anæsthetic a few days before.

After this anæsthetic episode everything went wrong, as they usually do when one thing gets awry. The outcome was that when the operation was finished we did not know whether the patient was infected or not. For fear that she was drainage was employed. The recovery was stormy, but satisfactory in the end.

3. *To promote adhesions and wall off weak spots.* The well-known property of the peritoneum to throw plastic lymph around any foreign body is often utilized when after injuries to the bowel ureter or other viscus there is fear of leaking and consequent contamination. The gauze drain here serves the dual purpose of isolating the vulnerable part and drainage.

4. *To keep the peritoneal cavity free of blood and other fluids.* Just here is a point of departure. One school cites the fact that blood or serum or indeed any innocuous fluid when retained in the abdominal cavity makes an

excellent culture medium and claims that the way to prevent infection is to keep the peritoneal cavity free of fluids. Even when hemorrhage has been controlled advocates of this plan expect in most cases especially where many adhesions have been broken up that there will be enough oozing to require drainage. They usually use a glass drain and empty it frequently with a long nozzle syringe.

The other school takes the position that the peritoneum is amply able to take care of any reasonable amount of oozing blood or in small or large quantities of other fluid, even when there is mild infection present, and they encourage this absorptive function of the peritoneum by leaving in its cavity a liberal quantity of normal salt solution, which is not only easily absorbed itself but dilutes the oozing blood and renders it more readily absorbed. Those who follow this teaching close the abdomen without drainage no matter how many adhesions have been broken up or how much fluid is left in the peritoneal cavity, and drain only when there is great fear of sepsis.

5. *To allow of more certain knowledge of the conditions present in the abdomen.* This argument is used in favor of the drainage tube, particularly in cases where there are great fears of hemorrhage. It must be conceded that hemorrhage occurring within a few hours after operation may be detected by means of the drainage tube and syringe. The same is true to a less degree of the gauze drain.

The objections to this argument is that in the vast majority of cases it is unnecessary to inspect the abdominal cavity to see if there is hemorrhage. The use of suture material that will not readily break or untie, with careful inspection of every possible bleeding point, ought to insure against hemorrhage; certainly this is true in all cases in which the tissues are not softened by sepsis or malignancy.

6. *Gauze tampons.* There are a variety of circumstances under which it is expedient to pack a bleeding point with gauze tampons to control the hemorrhage. In these cases the gauze, of course, also acts incidentally as a drain.

Histology and Physiology. Many of the reasons advanced in favor of drainage were promulgated before the histology and physiology of the peritoneum were understood. Wagner, in 1877, was the first to demonstrate the wonderful ability of the peritoneum to absorb fluids, even as much as the entire weight of the animal in twenty-four hours.

Muscattello, in 1895, proved that while there were no stomata between the peri-

toneal endothelium, that fluids and minute foreign bodies passed between the endothelium of the diaphragmatic peritoneum by a retraction of the cell protoplasm, from thence they were taken up by the open spaces found only in this portion of the peritoneum and passed on into the lymph circulation. This observer demonstrated a normal *intra-peritoneal current* capable of carrying fluids and small bodies to the diaphragm, and this too irrespective of position though gravity has a marked influence on the current. It has also been shown that the leucocyte is the principle bearer of foreign particles along the highway just described. Another fact pertinent to the question is that the leucocytes and other factors producing this intra-peritoneal current bear off pathogenic bacteria along this wonderful highway as readily as they carry innocuous substances, provided the enemy be not too numerous or too virulent.

These facts open up to our view the surprising capabilities of this highly vitalized membrane, and the abdominal surgeon should doff his hat to his ablest ally—the peritoneum.

Objections to Drainage. Excluding cases of acute suppurative infection, such as appendicitis and pelvic abscess that can be reached through the vagina, and wide spread general peritonitis, drainage is objectionable for many reasons, among which are the following:

1. *It is deceptive.* The writer has tried all kinds of drainage and found them unsatisfactory. Its use is not a guarantee against infection—the ever present menace to the patient; in fact, both gauze and the glass tube constitute an additional source of infection.

2. *Cases not drained do better.* The observation of any considerable number of cases will demonstrate this. A smaller percent of the patients become infected, they suffer less nausea, less pain, require less morphin, have less tympany, the bowels are more easily moved, the mortality is lower, and in a word, do better than cases that are drained.

3. *Drainage is neither scientific nor workmanlike.* I say this with an apology and all due deference to those distinguished gentlemen present who drain most of their cases.

Take a case of large myoma or pus tubes with adhesions. To drain such a case is to say in substance to the patient, "we can not open your abdomen, remove the abnormal growth, separate the unnatural adhesions, and close your abdomen without leaving your peritoneum in a condition that requires an open door." The "open door"

policy is all right for China, but not for the peritoneum. The presence of a drain is a tacit admission that we have left something undone that we ought to have done or that we have done something that we ought not to have done. Even in a case of suppurative appendicitis or pelvic abscess, if we could enucleate the sac in its entirety and without contaminating the surrounding tissues, just as we do a simple pus tube, there would be no need of drainage; but since this cannot be done we must content ourselves with less complete work and leave nature to finish the job. Joseph Price, who is known as an advocate of drainage in certain cases, is quoted as saying, "drainage is an evidence of incomplete work." In a word, when we drain we do so because we can not do better.

Treatment of Retro-Displacements of the Uterus.*

By Edward McGuire, M.D., Professor of Gynecology in the University College of Medicine, and Gynecologist to the Virginia Hospital, Richmond, Va.

It is not my purpose to deal with this subject in its entirety, but briefly and from a practical standpoint. I feel as if an explanation was due the Society for introducing a subject on which so much has been written and so little can be said that is original, but I know of no subject in gynecology where such wide divergence of opinion exists as to the proper treatment in individual cases of posterior displacements of the uterus.

We find one class urging operative intervention in all cases, some wedded to one form of operation and some to another, disclaiming the value of any local or mechanical measures. Another class claiming that only occasional cases demand surgical intervention beyond the repair of a relaxed vaginal outlet, if it exists, and relying entirely on local and mechanical therapeutics.

It is in the mean between these extremes that we must look for the most satisfactory results. Because pessaries and local applications have been abused through ignorance and too long continuance, it does not follow that they may not be employed with profit. Nor does it equally follow that because an operation has not cured a given case, it is never again to be indicated.

Undoubtedly many cases have suffered too long and have been injured by the ignorant and injudicious use of palliative measures. It is equally true that some of us have not been sufficiently conservative, and not a few cases which could have been cured by milder measures have passed from the practitioner into the hands of the gynecologist for operative treatment. Again, it does not follow that because an uncomplicated retro-version or retro-flexion exists, treatment is always indicated; some patients go for years with these conditions present apparently in perfect health and ignorant of any pelvic trouble. My experience in this class has been that they are cases which have been followed by little or no descent, which I believe is the most potent factor in the accompanying symptoms and results.

Experience has shown that anterior positions, even if excessive and beyond normal limits, do not necessarily produce symptoms, unless the uterus is on a lower level than normal, and the fact that they do when this is the case, is proved by the relief obtained from the use of a pessary which forces the cervix upward and backward, thereby increasing the anterior displacement.

The first change in the genesis of a backward deviation is descent, and the application of mechanical measures must be for this condition in the treatment.

In comparison, uncomplicated retro-displacements are rare. Under complications, I refer to metritis, endometritis, pelvic peritonitis, adhesions, tumors, lacerations of the cervix, etc. These conditions cause the uterus to sink downward either by increased weight or by traction, and are important features to be dealt with in the treatment.

A correct diagnosis is most important and often difficult, as any one who has ever examined many women will confess, even when they have been submitted to the influence of an anesthetic. Upon the diagnosis will depend the course of treatment to be pursued, therefore a careful inventory of the pelvis must be taken and all abnormalities noted—the size, position, inclination, and mobility of the uterus, the condition and position of the appendages and the presence or absence of adhesion. The greater per cent. of retro-displacements is due to conditions occurring at or following childbirth, such as traumatism, subinvolution, getting up too soon, etc., and are, therefore, preventable or easily curable if recognized and the proper treatment pursued. All lacerations of the pelvic floor and perineum should be repaired immediately, or in a few hours after the occurrence of the tear, as the torn parts can be

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more accurately adjusted to their former relations at this time than at the secondary operation. Where there is a laceration of the cervix unless there is hemorrhage, the operation is ordinarily delayed until after the puerperium, though if there is any reason to believe it is extensive the patient should be examined under the strictest aseptic precautions, and the immediate operation performed. I have followed this plan for twelve years and have never had reason to regret it. The importance of repairing these injuries cannot be over-estimated. For not only is sepsis prevented, but sub-involution of the uterus and ligaments as well, which is such a frequent cause of displacements.

Again, every obstetrical case should be examined at the expiration of the fourth week, and if any displacement is present it should be corrected and a suitable support introduced. Following this rule, I have often been surprised to find a backward displacement occurring after a normal delivery, which after being corrected and kept in position along with local depletive measures, resulted in a permanent cure.

Retro-displacements of the uterus may be treated in two ways, by mechanical means and by surgical operation. In considering the first; there are complications that frequently accompany these displacements and they are more often the factors in producing the symptoms than the displacement itself. They may not only prevent replacement, but render all means to keep the uterus in position useless. The obstacles to replacement are tumors, inflammation and adhesions. Inflammatory complications frequently require a month or more of preparatory treatment before replacement can be effected. At times a uterus which is at first too tender to tolerate a pessary will bear it without inconvenience after a course of treatment. In such cases the fundus may be raised and held in place by a pack of lamb's wool, while other depletive measures are practiced. When a relaxed vaginal outlet exists, it should always be repaired, preferably by Emmet's method; otherwise any effort at reposition will be rendered useless by the immediate recurrence of the displacement as soon as the intra-abdominal pressure is exerted on the uterus. An endometritis frequently exists, and when this is the case a thorough curettage is advisable. I have seen cases of retro-displacements relieved of all untoward symptoms by a curettage and a perineorrhaphy, even though the retro-deviation remained.

The method of the reposition of the uterus will depend on the complications present; if adhesions exist any method should

be attempted gradually with the use of massage. In uncomplicated cases it can be done immediately by certain manipulations, the methods of which are known to you all. The use of the sound and repositor is mentioned only to be condemned, they are both dangerous instruments except in the most skillful hands. When the complications have been treated and the uterus has once been restored to its apparently normal situation, it may be retained in position by a well fitting pessary. The Hodge pessary, Smith's, Emmet's, or some other modification of the Hodge, will practically serve all purposes,

The function of a mechanical support is to maintain the uterus on its normal level in the pelvis, and to keep the cervix in its normal position about one inch from the hollow of the sacrum, this is done by crowding the posterior *cul de sac* upwards and backwards into the hollow of the sacrum—or in other words it is to supplement the inadequate utero-sacral ligaments. The smallest sized pessary that fulfills the indications should be used. One properly adjusted should give the patient no consciousness of its presence. A pessary designed to prop up the body of the uterus is objectionable and dangerous, because its construction is based upon false principles. The same is true of one that will support the uterus by distending the vaginal walls. One with a curve too acute that will lift the uterus above the normal level and render the broad ligaments tense, will produce the same interference with the venous circulation in the broad ligaments as occurs in the descent of the uterus. In other words, it should be fitted to the individual case and not the case to any pessary, which is too often done.

A pessary is contra-indicated in all cases when there is a marked degree of inflammation of the uterus and appendages, and in all cases where there are adhesions and cicatricial bands holding the uterus out of position. Again, a relaxed vaginal outlet or a tumor in the walls of the uterus may render the support useless, and it will also generally prove a failure in cases of prolapse of the ovary.

Upon an accurate diagnosis, upon a true recognition and a proper treatment of the complications, and a certain amount of mechanical skill will depend whether the pessary will prove useful, useless, or injurious. There is still a large number and class of cases that cannot be relieved by these milder procedures requiring surgical intervention for their relief. The operations I prefer are suspensio uteri and shortening

the round ligaments, generally the Alexander method.

The following results are quoted from 75 cases in which these operations were done. Suspensio uteri and Alexander operation was about equally practiced in all these cases except six, in which the ligaments were shortened intra-peritoneally. The mortality was nil and with a few exceptions the results were very satisfactory. Five of the cases of suspensio uteri have borne children, three of which had had one ovary removed. Pregnancy and parturition were normal so far as I could learn, with one exception, a very neurotic patient who complained of a drawing sensation and a good deal of pain at the site of the womb. I examined this patient five weeks after parturition and found the uterus had become detached from the abdominal wall and was again retro-verted. She had the appendix as well as a pus tube removed in addition to the operation of suspensio uteri. One of the cases was a failure because the nurse allowed the bladder to become over-distended which tore the uterus from its attachment. One case of hernia has been reported. It was a bad case of pus tubes in which I used drainage, and one patient complained of some vesical irritability for months afterwards. In nearly all of the cases mentioned the method as advised by Kelly was followed.

The method adopted in the Alexander operations was that advised by Edebohle in which the entire anterior wall of the inguinal canal was opened. The ligaments were drawn out at the internal ring and the intra-abdominal portion shortened by stripping back the investing peritoneum, the wound was then closed after the manner of the Bassini operation for the radical cure of inguinal hernia, leaving the shortened ligament behind the lower edge of the internal oblique.

In a few of the cases the pelvic cavity was entered and examined through the dilated ring, and in one case a diseased ovary and tube were removed. In two of the cases the operation was a failure owing to adhesions that were not recognized and in one where a chronic oöphoritis was known to exist, there was some improvement. So far known, three have borne children. Pregnancy and parturition were normal. One of the cases, wife of a physician, complained of some discomfort at the site of the right wound. In no instance was there a failure to find the ligaments nor have any hernias been reported. The operation of Mann and Dudley was practiced in the intra-peritoneal shortening of the ligaments. In all six cases the uterus

was in a good position when they left the hospital, but it has not been possible to follow them subsequently.

I have been favorably impressed with this operation and expect to continue to practice it in suitable cases. As a primary measure to any of these methods of treatment of posterior displacement when the conditions existed, a perineorrhaphy, a trachelorrhaphy or a curettement should be done; the latter as a rule should always be followed when the round ligaments are shortened.

In conclusion I shall briefly discuss the advantages and disadvantages of the Alexander operation and suspensio uteri.

1. The mortality should be nil or almost so in either, but there is certainly less risk in the Alexander operation—infection in one case would mean a local suppuration in the other, possibly a fatal peritonitis.

2. Alexander's operation is to be preferred by far from the standpoint of pregnancy; for in suspensio uteri a small per cent of cases have been followed by disturbances of pregnancy and difficulties of labor.

3. It is preferable because it seeks to support the uterus by its natural ligaments and forms no intra-peritoneal adhesions which may be an element of danger.

The disadvantages are (1) that two incisions are made in the abdominal wall instead of one as in the ventro suspension or intra-peritoneal shortening of the ligaments, especially is this the case when the cavity is entered through the dilated rings thereby increasing the risk of hernia.

- (2) That the operation proper is limited in its application. It is only applicable in those cases where the uterus is mobile.

- (3) The difficulties in diagnosis. We cannot always definitely determine the existence of adhesions between the uterus and the anterior wall of the rectum which may render the operation nugatory.

- (4) In cases associated with marked descent. While the operation cures the version, it does not lift the uterus to a higher, or to the normal level, thereby falling short of the indication for any operation.

- (5) In ovarian prolapse, especially if the ovarian ligaments are long, Alexander's operation cannot be depended upon to raise the ovaries to a normal position.

- (6) The absence or attenuation of the ligaments. These disadvantages are more apparent than real. The presence or absence of the ligament will depend on the experience and skill of the operator to find it more than on any abnormality. While it is true that we may find the ligament to be only a thin cord in the canal, the intra-

peritoneal portion is nearly always much better developed and of sufficient strength to hold the uterus in the anterior position.

The operation of suspensio uteri has the great advantage over Alexander's operation in that it permits the inspection of the condition of the peritoneal cavity—affording a much better opportunity for the conservative or radical treatment of the diseased appendages, and the separation of adhesions.

1. It is preferred in cases where there is a decided prolapse, for this operation, lifts the uterus on a higher level than Alexander's, and thereby fulfills a most important indication.

Its disadvantages are (1). That it is more dangerous both at the time of the operation, and later on, from the presence of the adhesion that is formed.

(2) That it fixes the uterus in an unnatural ante flexion for a posterior flexion—substituting one abnormal position for another.

(3) The uterus being fastened close behind the symphysis pubis, adhesions to the bladder may follow, or the pressure as the bladder becomes distended, give rise to dysuria.

(4) Should pregnancy occur, it has been found that in a certain (though small) per cent. of cases, the operation has been followed by abortions or difficulties of labor that may endanger the woman's life.

Finally, intra-peritoneal shortening of the ligaments possesses all the advantages of suspensio uteri except in retro-displacements associated with marked descent, where the other operation is to be preferred.

The Use of Food as Medicine.

By J. Frank Kahler M. D., Canton, Ohio.

I shall attempt to present my subject, not because of expecting to present some fast rules of diet in disease or health; for this is impossible; neither that I feel able to present many new things on the subject; but rather that I hope to drop at least one thought which may be of interest to this society. This being done then I shall feel amply rewarded for this effort.

We should always be ready and able, to give a patient an opinion as to diet; and in acute diseases, prescribe a regimen. I consider this a duty incumbent on a physi-

cian, perhaps more so, frequently at least, than it is a duty to prescribe drugs. Many a persons, sick or well, preferred a savory and tempting dish, even if not so nourishing or digestible; and often the palatability made it more digestible, in spite of chemistry and physiology to the contrary.

Therefore, in patients suffering from some subacute or chronic lesion, it is often wise for us to consider the appetite of a patient, before prescribing a definite regimen.

I shall base my conclusions on this principal,—as given by Foster, than whom we have perhaps, no better authority,—That carbohydrates, i.e., the sugars are absorbed mostly by the capillaries of the villi, through the intestinal epithelium, and these enter into the portal vein.

The fats are absorbed mainly by the lacteals and pass through the thoracic duct into the venous system. Foster further states that the absorption of the proteids or peptones are less understood and more difficult to follow; but that they are absorbed mostly by the capillaries and as soon as they pass into the blood all trace of them is lost. It is believed by many that the leucocytes are mostly concerned in the absorption of proteids and fats.

And further, a carbonaceous diet taxes the excretory organs to a lesser degree than animal food. However, I am not an advocate of an exclusive non-nitrogenous diet, either in health or diseases; but I firmly believe that the above named conditions are excellent indices for us in prescribing foods in certain forms of acute diseases.

In all acute infectious diseases we have an increased diapedesis of leucocytes; the degree of wandering white corpuscles, or number, depending on the acuteness and malignancy of infection and height of fever.

It is the object of these wandering cells to incorporate within themselves foods, and toxic products, or micro-organisms—one or both of which are found in all infectious or contagious diseases.

The more healthy and vigorous those phagocytes are, the more able they will be to meet these germ enemies and incorporate them within themselves, take them back into the circulation and thus throw them off by way of the emunctories (i. e. Kidneys, Skin &c.) Now if, on the other hand, during the period of an acute infectious lesion, we feed the patient on the albuminous foods largely, (which kind of food especially is taken up directly by the white blood corpuscles) we thereby increase the labor of these cells thus diminishing

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their capacity for absorbing the toxic products.

Water should be taken in large quantities, in all forms of toxemia, for this increase in the fluid of circulation, increases phagocytic diapedesis, and amoeboid movement, resulting in increased "taking in" and "throwing out" of all forms of toxic products.

Water is never contraindicated, unless for brief periods; as when it increases nausea.

Some one has said that when a dyspeptic patient asks us the question "What shall I eat?" reply "Eat what you like." If he asks, "How much shall I eat?" say to him "Eat as much as your appetite demands." Although I do not favor strict and dietetic rules, nevertheless I deem the above mentioned remarks as going too far.

The capriciousness of appetite is never a safe guide; but a *natural* longing for foods is a good index for the selection of food.

Therefore in prescribing a regimen for patients who are afflicted with some acute infectious or contagious disease,—with due consideration for the *natural* longing for certain foods—we should make our selections largely from the non-nitrogenous foods.

To free indulgence in the proteids are especially harmful in the more severe infectious diseases, such as Typhoid &c; because of the increased tax on the leucocytes in the metabolism of the proteids; and because of the greater strain on the eliminative organs.

So much has been written about the feeding of typhoid patients. It is my conviction that to prescribe a regimen in this disease scientifically, we should exclude the albuminous foods.

Therefore the foods par excellence, are the starches and fruit. The carbohydrates should be cooked for from four to twelve hours. Fruit, selected from well developed products baked or stewed for from two to ten hours, so as to convert, or approach the conversion of these foods into dextrin, before it is ingested. When thus prepared, this class of foods is more readily assimilated and produces less residue than proteid foods.

We believe in a wide range from which to select foods in enteric fevers. In presenting a diet list for a typhoid patient, during the course of the disease we may select from the following foods; bearing in mind the *natural* food desire.

Bread, dried and served hot, never served half hour after having been prepared, neither toasted brown; rice, barley, flour or oat-meal broth. These starches should

be boiled for eight to twelve consecutive hours. Young peas are excellent and should be boiled six hours. Tomatoes strained and well boiled are good. The early vegetables which grow above the earth's surface are nearly all easily assimilated, and we would frequently permit the use of asparagus and if the bowels are obstinate spinach may be frequently prescribed with advantage.

Fruits are admissible, but should be carefully selected. The banana, in its true home, where it becomes mature before picking, forms an important part of the diet of the inhabitants and it is the nearest perfect fruit food that grows.

This variety however, used there in an uncooked condition, will not bear transportation; consequently those which are sold in our markets are of an inferior variety; picked long before they are ripe or mature, and the ripening of which is almost a premature decay.

They are exceedingly difficult of digestion, consequently we should never prescribe the ordinary banana. But if banana-meal can be procured, which has been made from ripe fruit in its native home, we can prescribe it in many typhoid cases with impunity.

All other fruits contain very little nourishment; but because of the flavor and frequently stimulating digestive secretions we sometimes subscribe orange juice, well-baked apple or stewed peach, lemon, with very little sugar—this frequently assists proteid digestion.

The above mentioned starch—foods may frequently be flavored advantageously with the above named fruit juices or vanilla.

There are two reasons why milk should not be the principal food in enteric or in acute infectious fevers. First, because massive curds are formed in the stomach which are very hard to digest and there is more residue than in many of the starchy foods.

Second: Because in the oxidizing process of this class of food, more effort is required on part of the white cells and the eliminative organs. If, however, milk is very palatable in a given case, and it is sipped or well diluted, it may be prescribed.

In typhoid we have self-consumption of tissues, in spite of all we can do; therefore in approaching a physiological metabolism the non-nitrogenous foods are indicated.

"But the burdens that make us groan and sweat,
The troubles that make us fume and fret,
Are the things that have not happened yet."
—Burdette.

A Puzzling Case.

By E. H. Trickle, M. D., Cutler, Ohio.

On Tuesday October 2nd, I was called to see Mr. David Dunbar, of Dunbar station, Washington County, Ohio, and found him vomiting and suffering great pain in his stomach and bowels.

I gave him a hypodermic injection of morphia, and then examined him for rupture or any other obstructive trouble, as the family informed me that they could get nothing through him. He was vomiting bile, and straining very hard. As soon as the morphia relieved him I got from him the following history. His bowels had moved naturally on the morning of the day previous. He spent the day in the cornfield, much of the time in a stooping posture, as he was pulling off ears of corn without husking, after having thrown down the shock.

Asked what he had eaten the day previous he said "nothing out of the ordinary," and mentioned some ham and sweet potatoet as part of his last meal. He was taken sick shortly after coming home from the cornfield, suffered constantly, and obtained no relief until I was called. I stayed with him about two hours, and as he seemed quite comfortable, I left him a few morphine powders to take if the pain returned. I also left some small calomel pellets, and directed that after he had been free from pain for six hours, one to be given every hour until six had been taken, then follow with small doses of epsom salts. Recalled Wednesday evening and found that directions had been carried out, perhaps too faithfully. for, in addition to the calomel, he had been given over half a pound of the salts, and still no movement of bowels. Vomiting had returned and there was considerable distress in the bowels. Injections had been used, but came away clear. I remained with him all night, keeping him as comfortable as possible, and at 9 A. M., Thursday morning a soap-suds injection was followed by a consistent passage, part of it well moulded. He expressed himself as feeling greatly relieved, and stated that he now thought his trouble was over.

I went to the railroad station near by, and as the train was not due for half an hour, I returned to the house, and found that he had had another passage,—a large bolus, thickly studded with watermelon seeds. This was a surprise to me, as I had failed to elicit any history of his having eaten melons, and as the melon season was over, I had not even thought to "look

under the bed for a wash-pan full of rinds." When he was shown the seeds he recalled the fact that he had found a fair sized melon while at work in the corn-field, and notwithstanding the fact that it was a little green, he had eaten it all including the seeds.

As I had tried to make my first diagnosis by "exclusion," and finding nothing but pain and vomiting of bile, I concluded that I was up against a bad case of "Billious Colic." I now felt constrained to change it from billious to "melon-colic." The idea of any further obstructive difficulty was set aside, and leaving medicine to check any too great running off of the bowels, I went home.

The bowels, during the previous three days had been very much distended with flatus, which now seemed to be diminishing, and I felt but little uneasiness as to the future of the case.

In the evening of the same day I was recalled and found him in a state of collapse. Arms and legs cold and clammy,—skin wrinkled like a wash-woman's fingers, pulse feeble and rapid, no history of pain or cramps,—only a sense of weariness. He would frequently say "No, I do not suffer, but I am so tired."

I found that he had been having watery discharges about every ten minutes since I had left in the morning, and I soon discovered that they were the peculiar "rice-water" discharges of cholera.

I sent for counsel, but at once began with hot mustard baths and stimulation to combat the collapse. The rice-water discharges continued with but little abatement in spite of all we could do.

My counsel, Dr. E. P. Cooke, arrived next morning, and for five days and nights we were unremitting in our efforts to sustain him, realizing, at the same time that the case was hopeless. He did not vomit any more, and took nourishment,—milk and egg nog, at frequent intervals, but nothing that he had taken since his first sickness passed through him. As the tympanitis subsided leaving his bowels flattened, we could detect a very small nodule in the region of the duodenum, and diagnosed obstruction at that point. This was on the eighth day, and we realized that it was too late to operate.

The patient remained conscious until the last, and died in the afternoon of the tenth day of his sickness.

The following morning we made an autopsy and found the bowels apparently healthy throughout except about six inches of the duodenum. This was gangrenous, as was also the gall bladder.

There were some "barber pole" lines of healthy tissue running spirally around the gangrenous portion of the gut, strongly suggesting a "twist" of the intestine, but this must have occurred after the seeds got beyond that point of the intestine.

Of course the thing to do in obstruction of the bowels, is to cut down and remove it with as little delay as possible, after it is recognized and reasonable efforts made otherwise, but the trouble in this case was to recognize it amid such a baffling array of symptoms.

Gastro-Enterostomy With The Murphy Button in Malignant Strictures of the Pylorus.*

By F. T. Meriwether, M.D., of Asheville, N. C.

In this paper discussion is limited to the use of the button in malignant diseases of the Pylorus, for in benign strictures it is possibly, in many cases, best to use the suture. The thickness of the wall of the stomach in benign cases, at times as much as one-half an inch, precludes the successful use of the button. And then the saving of time is not so important.

The mortality of the suture and the button operations are about the same, approximately 35.2, but the fact that a great many of the button operations are done on advanced cases, and the suture operation on the selected cases, too, advantage is rather with the button cases.

It should be impressed upon the profession that malignant growths of the stomach are surgical diseases, and as such should be treated. Few of these cases reach the surgeon until hopes of a cure are past, and then only palliation can be hoped for.

Gastro-Enterostomy is only palliative, but it prolongs life, in many cases, from two to three years, gives relief from a great deal of pain and suffering and if the other organs are not involved it often restores the patient to a state of comparative good health temporarily.

A very important part of the technique is in properly preparing the patient. For at least three or four days preceeding the operation, longer if possible, nothing but sterilized food should be given by the mouth and that only in small quantities. Experiments have shown the large number of bac-

teria in the stomach after taking food as ordinarily given. If necessary the rectum may be resorted to, care being taken not to irritate it, for it will have to be utilized after the operation. For twenty-four hours before the operation nothing should be given by the mouth. In the preparation, the stomach should be washed at least three times a day, and immediately before the operation. Even with these precautions, when the stomach is opened, it is found that in many cases there are remnants of food taken days before. The mouth, teeth and gums should be thoroughly cleansed frequently.

Von Häber's posterior operation should be preferred, though it is little more difficult than the Wolfer or anterior operation. With it there seems to be less regurgitation of bile, and the discharge of the button is favored more. Care should be taken to suture the edges of the Meso-Colon through which the anastomosis is made, to the stomach, for otherwise this opening will probably contract. The button opening does not contract. The incision for the insertion of the button is usually made too large, and then when the button is closed, there is so much puckering of the walls of the stomach and intestines as to interfere materially.

The incision should not be more than about two-thirds of the diameter of the flange of the button, which should be gently worked in sideways. Re-enforcing sutures are not necessary, for if the button is closed properly leakage cannot take place. A few sutures should be taken in the proximal loop of the intestine, supporting it against the stomach. This is more necessary in the anterior operation, for in it there is more tension upon the union. These sutures aid in preventing the bile entering the stomach and encourage the food passing into the distal intestine.

It is best to have the direction of the intestine such that the waves of peristalsis of the stomach and intestine are in the same direction. The button is usually passed in from one to three weeks, though it may be retained as long as three months. At times it will lodge in the rectum and for that reason, if the button is not passed in three weeks it is well to explore the rectum every few days. Even if the button is retained in the stomach, it will do no harm. Feeding should be commenced as soon as the patient is off the table, small quantities being given at first.

The author advises a gastrostomy in all cases, either by a Kader or Witzel operation, or what is better, a combination of both of them as modified by him. In it an

*Abstract of Paper read before the Southern Surgical and Gynecological Society, Atlanta, Ga., Nov. 13th, 1900.

oblique funnel-shaped canal is formed, the tube issuing through the left rectus muscle. This canal will accommodate a large tube, which can be easily removed and replaced.

The great advantage of being able to feed the patient at once after the operation with predigested food, first washing out the stomach, is almost invaluable. The causes of death in a large percentage of the cases are from asthenia, continued vomiting, inanition, obstruction of the button. By being enabled to wash the stomach before every feeding, and to continue feeding irrespective of the patient's feelings, would save a great many of these cases.

In very weakened patients the operation might be done under local anesthesia and no matter what the condition is the operation should be offered to the patient as affording the only method of relief in this most fatal disease.

Some Interesting Experience in the Use of Suprarenal Liquid with Chloretone in Three Cases.

By Willard Chaney, M. D., Professor of Laryngology and Rhinology in the Michigan College of Medicine and Surgery, Detroit, Mich.

About two years ago W. H. Bates*, who had made a study of the suprarenal gland, announced the opinion that its extract is incomparably the best pure astringent in all inflammations, the most powerful hemostatic and the most efficient tonic to muscle fibers.

Lewis S. Somers†, from an experience with suprarenal extract in the lower animals, and four hundred and fifty cases in hospital and private practice, concludes, among other things, that "the aqueous extract of the suprarenal gland is the most powerful astringent and vaso-motor constrictor that we possess." He adds: "It first blanches and then contracts mucous tissues, and will subdue active or passive inflammation."

Such positive evidence as that furnished by these observers is sufficient to scatter all doubts that may be clouding the mental horizon of any of my confreres. Before adding my quota of experience to that of many others, I wish to state that there is now no difficulty in securing a first-class suprarenal preparation. Formerly it was necessary for the physician to provide himself with the dried, powdered gland, from

which an aqueous extract was made and boracic acid added to preserve it. Such solutions deteriorate rapidly, particularly in warm weather; and soon become unfit for use. The necessity of preparing fresh solutions daily in itself was sufficient to deter the busy practitioner from giving the valuable agent the benefit of a fair test.

Messrs. Parke, Davis & Co. have devoted considerable time to an exhaustive study of suprarenal substance, and they have placed upon the market a permanent solution of suprarenal extract preserved with Chloretone, which is a most useful preparation for the rhinologist and laryngologist. Aside from the peculiar effects of suprarenal extract, with this preparation we obtain the local anesthetic and antiseptic actions of Chloretone. These are very important and very useful properties in all nasal work, when pain and sepsis so often annoy the patient and antagonize our efforts to secure the best results from operative procedures.

I have used Suprarenal Liquid with Chloretone (P., D. & Co.) and the more I use it, the more I believe it is capable of a wide range of application. I will mention but three cases, as these will be sufficient to demonstrate the prompt and positive effect of this remarkable preparation.

Case I.—Mr. S. has frequent severe attacks of epistaxis. I gave him a small vial of Suprarenal Liquid with Chloretone and directed him to instill a few drops of the preparation into the nares twice a day. The result was immediate and permanent relief.

Case II.—Mrs. P. had a nasal polypus attached to the posterior portion of the middle turbinate. After swabbing the nostril with Suprarenal Liquid with Chloretone the growth was removed with a Jarvis snare, without pain or hemorrhage, and with no untoward sequelæ.

Case III.—Mrs. R. suffers with laryngeal phthisis. A laryngoscopic examination revealed much swelling and ulceration of the arytenoid cartilages. The glottis was partially obstructed and the dyspnoæ was suggestive of an advanced case of laryngeal diphtheria. There was also some dysphagia; nothing but mild liquid could be ingested. I caused a few drops of Suprarenal Liquid with Chloretone to fall from a curved pipette on either side of the epiglottis, allowing the fluid to flow over the inflamed area. Comfortable breathing and improvement in ability to swallow followed the application almost as if by magic.

I offer these facts merely as suggestions as to what we may expect to obtain in the use of Suprarenal Liquid with Chloretone.

*Medical Record, October 8, 1898.

†Merck's Archives, June, 1900.

I trust these remarks will stimulate some other seeker after new truths to take up and investigate this valuable preparation.

Preliminary Announcement.

The Ninety-fifth Annual Session of the Medical Society of the State of New York, will be held in Albany, January 29th, 30th and 31st, 1901.

The meetings of the Society have always been replete in scientific work as becomes the representative society of the medical profession of the Empire State—and it is confidently expected that this meeting will equal those which have preceded it.

This circular letter is sent to every member of the Society with the request that those who desire to read papers will communicate at once with the Chairman of the Business Committee, Dr. Frunk Van Fleet, 63 East 79th Street, New York City, or with the President, Dr. A. M. Phelps, 62 East 34th Street, giving the title of the paper and such other information as the author desires.

As there will be a great many papers offered, and the time necessarily limited, it is suggested that papers be condensed as much as possible in reading, as they can be published more fully in the Transactions. Arrangements for reduced fares can be made when purchasing railroad tickets.

A. M. PHELPS, A.M., M.D.

How to Wash the Baby.

As a rule babies should be washed by hand. Machine-washed babies do not mature so rapidly, and being rubbed on a washboard is likely to wear holes in the baby.

The baby should be put to soak over night in lukewarm water in which has been dissolved a handful of pearline. This takes the place of the old-fashioned way of leaving him in a wash-boiler on the stove for three or four hours and saves much labor.

In the morning, after rinsing in three waters, add a little ball blue to the last and pass the baby quickly through it. Too much blueing is apt to give the baby a faded look.

We do not think that babies should be put through the wringer too soon after washing. Better results are obtained by hanging them on the line at once, if it be a sunny day. Otherwise they may be hung up before the kitchen fire, and when thoroughly dry starched and ironed at your convenience.—*Mrs. Lydia Pinkham Maginnis in "Life."*

Hunter McGuire's Opinion.

The late Hunter McGuire, the most celebrated surgeon of his time in the United States, if not in the world, was asked for his opinion of antikamnia by Dr. Thos. C. Haley, of Riceville, Va. Dr. Haley, in writing of this circumstance to The Antikamnia Chemical Company, says as follows:

"I recently wrote to Dr. McGuire and gave him my experience with antikamnia in my own case and that of others. Of myself, I said that I had been using the five-grain tablets for five years consecutively, and always with great and signal relief to my sufferings. I vouched for it as being the grandest succedaneum for morphia. While I entertained these opinions personally, I still felt that the quantity taken should be justified by consultation. Hence the letter to Dr. McGuire, and I am pleased to hand you herewith this reply."

The following is Dr. McGuire's reply:

St. Luke's Home, Richmond, Va.,
Nov. 8, 1894.

Thos. C. Haley, M. D.

My Dear Doctor:—I don't see any reason why you shouldn't continue to take the remedy (Antikamnia Tablets) of which you speak and which has done you so much good. I don't believe it will do you any harm. With kind regards and best wishes,

Very truly yours,
(Signed) Hunter McGuire.

Gonorrhea.

In the treatment of this affection it is considered essential by many authorities that during the acute stage the medication should be internal, and that injections should not be resorted to until the acute inflammatory symptoms have subsided. The remedy selected for the local treatment of these cases should be one which will not injure the delicate and sensitive urethral mucous membrane, while sufficiently powerful to destroy the gonococci. It should exert an astringent effect in order to reduce the congestion and arrest the discharge. A remedy which will do all this without giving rise to subsequent cicatricial formation has long been a desideratum. For the purpose Micaiah's Medicated Uterine Wafers have proven of great service. One wafer dissolved in three ounces of water as an injection will give the most satisfactory results. For convenience bougies may be prepared by combining the wafers with cocoa butter and insert into the urethra twice a day, and on retiring.

THE
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Editorial Department.

E. C. REGISTER, M. D. J. C. MONTGOMERY, M. D.

Editors and Publishers.

No. 36 SOUTH TRYON STREET, - - - -
 - - - - - CHARLOTTE, N. C.

SUBSCRIPTION. \$2.50 PER YEAR,

SAMUEL L. MONTGOMERY, M.D.

The death of this well-known physician, of Concord, leaves a vacancy in the profession of the State which can not be filled.

Dr. Montgomery was only 46 years of age, just in the prime of life, with a reputation as a man and a physician second to none, and his departure comes as a cruel shock to his family and many friends.

He was educated at Trinity College and received his medical diploma from the University of New York. He first settled in Monroe, but later moved to Concord where he spent the years of his life in ministering to the sick and afflicted of his city and surrounding country.

He was twice married, his first wife was Miss Cora Winchester, of Monroe, and to them were born three children; his second wife was Miss Lizzie Norris, of Wake county, who bore him four children. His wife and five children survive him.

His life was an open book; he was frank and open in all his dealings with his fellow men. His interest in his patients was genuine and intense. There was no counterfeited concern about their welfare, no constant looking for pecuniary reward for his services, but his labor was one of love first of all. As a man he was a genial friend, full of life and its enjoyment, a sure antidote for a spell of melancholy, and his encouraging manner brought hope to many who were ready to despair.

He joined the State Society in 1885, and was a regular attendant at the meetings to which he contributed in many ways.

THE STOMACH TUBE IN INFANCY.

The value of washing out the stomach in gastro-intestinal disturbances of young children is very great. In fact, it is one of the most valuable things we can do for the little sufferers. It can be done readily in

children under 18 months of age; older ones are usually so much excited over the procedure that it is very difficult to get the tube down.

The apparatus consists of a No. 16 soft rubber catheter, a piece of rubber tubing the size of the catheter and a small glass funnel. The left forefinger is used as a tongue depressor, while 10 inches of the catheter is rapidly pushed backward into the throat and down into the stomach.

The tubing and funnel are attached and the water poured in. Plain boiled water is the best to use, a few ounces, more or less, according to the age of the child, is allowed to run in and then siphoned out. This is repeated until the water comes out clear, when the tube is rapidly withdrawn.

The introduction of the catheter is comparatively easy, as it can hardly go anywhere else except into the stomach, and if rapidly done there will be little or no straining and vomiting. The relief afforded is prompt and continues for some time, it reduces the temperature, allays vomiting, quiets the nervous restlessness, and often turns the scale towards recovery in otherwise hopeless cases of cholera infantum.

In protracted cases of stomach derangement, the appetite entirely fails, the body is weak and exhausted, refuse all kinds of nourishment, even water is simply allowed to run out the mouth. The fever has disappeared, or is slight, the bowels are less active and seemingly able to take care of food, but none comes and in a short time the child dies of starvation. In such cases many lives may be saved by the stomach tube through which water and nourishment are given. A few feedings with the tube will restore the failing strength, and the appetite returns and the food can be given in the ordinary way.

CORNING'S METHOD OF ANESTHESIA.

A number of surgeons have tried the injection of cocaine into the sheath of the spinal cord as a method of inducing anesthesia and with success in many cases. The fondness of the profession for a foreign name is shown in the attempt of several one-horse journals to ignore Dr. Corning's claims as the originator of this method.

Tuffier, of Paris, showed the way to do the thing to a number of admiring friends during the last Congress and, of course, it is his "Tuffier's method." It would be just as well to call it Murphy's method, or Goffe's, or Marx's. It is neither of these, though, perhaps, each one has done something in perfecting the plan and in arranging the details, but the original part of the

work was done by Corning, and if it is to be called by any man's name then it must be Corning's method. This method seems to be devoid of any danger, though it is attended with some unpleasant symptoms as headache, vomiting, rise of temperature, etc.

However, these soon pass away, or if very severe they can be relieved by nitroglycerine or hyoscine hypodermically. The technique of the injection has been described over and over again during the past few months. Some of the essential points are absolute cleanliness of the hands, solution, instrument and site of injection.

Three-fourths of a grain of cocaine is the maximum dose, the average being one-fourth of a grain. The anesthesia lasts from one to five hours, and comes on within 20 minutes after the injection. A variety of operations have been done under this anesthesia, amputations, hysterectomies both vaginal and abdominal, appendectomies, in fact nearly all the ordinary operations on the pelvic and lower abdominal viscera.

A recent writer reports its use in several cases of labor in which the pains were entirely controlled. While chloroform and ether will not be displaced by cocaine in this manner, still we must add cocaine to our list of anesthetics in major operations on the lower half of the body.

THE DOCTOR AND THE SOLDIER.

While the physician is burning the midnight oil to discover a better way of curing and healing, the scientific soldier is racking his brain in the search for a more destructive weapon of war.

Rapidity of action is the all important characteristic of the best gun and the soldier is passing from smokeless powder to centrifugal force and the newest powderless machine gun spits out bullets at the rate of 3000 a minute. According to the Charlotte Observer, The London Times says that this new gun was invented by James Judge, a well-known engineer of Newcastle, England. It is a patent centrifugal quick-firing machine gun, five feet high and weighs 500 pounds. The motive power is electricity transmitted to a motor attached to the side of the gun. The motor causes a disk to revolve at a high rate of speed. The bullets, which are introduced into the interior of the disk at the axle, travel along curves in the interior to the circumference and are there impelled through a barrel. The disk is intended to make 12000 revolutions a minute and will eject shots from the muzzle of the gun with an initial velocity of 2000 feet per second.

The gun will maintain a continuous fire and a shot may be discharged at every half revolution but in practice one shot will be fired at every fourth revolution. The bullets are spherical and measure 3-16 of an inch in diameter. There is no heating of the barrel of the gun because of the continuous stream of cold air which is impelled through it by the turning of the disk. The disk is set in special bearings which allows it to revolve at this rate without heating.

In the next war between two first class powers we will have a new military surgery in which will be described the proper treatment of "pepper box top" wounds of the lungs or abdomen. The cause of death in such cases will be very transparent. If such wounds should ever come to treatment the question would be whether to try and put a piece of gauze in every hole or simply sew the man up in an antiseptic bag.

In the course of time it will come to be simply a matter of touching a button and all the folks on the other side will be blown into sausage meat, war will be pressing the button and the machines will do the rest. Life and victory will be synonymous and they will be for the man who touches the button first. But the doctor may find a way to gather up the scraps and put them together with a kind of vital glue, or press them in a mould and skin graft after squirting in four quarts of life-giving elixir. And in all the work of destruction the physician will find a way to help the wounded back to life.

TUBERCULOSIS AMONG THE POOR.

We are continually reading well written articles on the way to cure tuberculosis or the way to prevent consumption in the rich or in those who can afford to pay \$25 a week in some sanitarium but the how to cure it or prevent it in the poor huddled up masses of humanity is left in doubt or not considered at all.

The poor we will have with us always and as tuberculosis is contagious we will have tuberculosis with us always unless some practical plan of curing and preventing it among the poor can be formulated. The root of the matter does not lie in the upper crust but in the soil under-neath. Some grass will grow better the more it is trimmed off at the top. In other words with consumption we are only trimming away the top here and there. Dr. Blake in the Alabama Medical Journal has called attention to the prevalence of tuberculosis among convicts and he is urging certain measures for their help. Now this is getting down at the bottom, the proper place

to start and the preventive treatment will be most secure if built upon such a foundation. No better place can be imagined for the dissemination of this disease than in jails and penitentiaries. The stagnant unwholesome air at best if loaded with tubercle bacilli makes the strong man an easy prey to the disease. In convicts camps the prisoners are required to sleep huddled up together and the bed-clothing is not remarkable for its cleanliness. In this pile the consumptive and his healthy partner lie down together and in a time they both lie down to rise up no more except at the expense of the county.

The consumptive should be kept separate from the healthy prisoner and here the doctor must come in to say who is consumptive and who is not. The State can hardly afford to send her tuberculous convicts to a sanitarium but she can keep them from infecting those who are healthy with very little trouble or expense.

And then the poor in city and in country how can we help them and protect ourselves?

A man builds a row of negro houses, he squeezes the contractor down to the lowest figure and the contractor squeezes the houses down to the lowest dimensions and the tenants squeeze the air down to the lowest amount, the whole family sleeping in one room, breathing the same dust, inhaling the same bacillus over and over again. In treating a case of consumption in such a place shall we use creosote or cod-liver oil or both? It would do just as well to give the creosote to the landlord and the cod-liver oil to the contractor, and let the patient go out in the country and drink spring water.

Wanted—a practical plan of treating, especially of prevented, tuberculosis among the poor.

HOUSE FURNISHINGS.

At first sight it may not appear that this is a very medical subject at all, but to look closer into the matter we will find that it does concern the health and happiness of people and in no small degree. In the first place it is a source of constant worry and bother to the housewife. She has her eye on her neighbor and watches with great interest the putting up of new curtains and the prevailing shade in carpets. Curtains are put up over doors with no earthly use except to give the draped effect and to keep up with the community. To the man, the only interest is in the bill which is sent in at the end of the month. Shades, curtains, hangings, carpets, china closets, crooked-

leg tables, and the like are to him only a part of the cost of living and he is anxious to have them as cheap as possible.

So then there is a certain wear and tear on the nerves wrapped up in the furnishing of a house. The man who has attempted to put down the hall carpet himself, to save expense, can tell you that, and the woman who has tried to follow the changing styles of parlor furnishing will say amen. But the main point of attack is the fact that modern house furnishing is not clean. It is not meant that your parlor carpet with cream rose figures is dirty in the ordinary sense, but that it is a regular nursery for germs that may give your child diphtheria or your wife tuberculosis. It may be swept out every day until the roses fairly shine, but the dust slips the deeper in. And your hangings, and heavy curtains, and shades, and well drawn blinds, keep out the light and the average parlor is like the land of Egypt for days and even months at a time so far as any natural light is concerned. And under these conditions the bacillus grows bold and impudent. Matting is very little better; it can be more easily taken up and cleaned, but it looks so clean on top that the tearing up is postponed from day to day and the dust sifts through until a respectable layer is formed, a hiding place for disease.

The curtains and hangings around windows and doors keep out the sunlight and there is nothing more deadly to germ life than the direct rays of the sun. Of course, you can't let in the sun on your rose figured carpet, it will fade the beautiful cream. The thing to do is to sell off your carpet and hangings and let in the light, plenty of it. We profess to know something about disease and its cause, and we should put it to practical use. Soap and water and sunlight are two things most fatal to germ life, and it should be possible to use these two agents in every room in the house and every day if necessary. In this day of carpets, heavy hangings, antique furniture and delicate bric-a-bac this can not be done. The modern living house should have each room so finished that the floors could be wiped freely every day or at least every few days, and clean pine boards are far better than dirty ingrain carpets.

The rooms should be well lighted and aired, and if there is anything in the room that interferes with this, it is a nuisance and should be cast out no matter how fashionable it may be.

The houses of the poor are usually dirty, plainly and painfully so, but the mansions of the rich are often more unclean in an obscure and subtle manner. It is a fool-

hardy thing to inveigh against a style or fashion, it is like giving a homœopathic pill for constipation, but a fashion that is so evidently pernicious and harmful should be wiped up and out with a wet rag dipped in strong bichloride.

THE NORMAL BODY.

Mark the perfect man for he is as great a rarity in the physical as in the spiritual world. The ideal man does not exist, perhaps, one who has a fine liver has a bunion, another whose brain is as clear as a bell is afflicted with hemorrhoids; this person has a perfect digestion but his mitral valve leaks a little; that man has a normal kidney, but there is a slight dullness over his right apex, and as in the most of us there is a screw loose somewhere.

In the healing art, however, it is well to keep in mind the perfect man, in other words, know your anatomy. We should know how a normal throat looks, how a healthy pulse feels, how the perfect lung sounds, and we should keep the mental picture or condition with us at all times. The pathologist is only interested in diseased tissues, but to do the best work we should daily consider the healthy organs. In our medical colleges for instance suppose we had *halics* as well as clinics, a place where healthy people were examined for their health as in the clinic sick people are examined for their disease.

We can learn much anatomy by the dissection of the dead body, but we do not practice upon dead people, that is they are not dead when we begin, but upon the living, and so the student should be drilled in the appearance and feel of normal joints, muscles, organs, etc. To most men there is nothing very interesting in listening to a normal heart, but it is only by being interested in the normal heart sounds that we can easily recognize the abnormal.

When that obscure and doubtful case of appendicitis came to your consultation room how much better it would have been for you and the patient if you had known just how a normal appendix felt. The skilled diagnostician is one who knows exactly what ought to be, the better he knows that the better he knows the disease and its manifestations. The general symptoms are important in arriving at a correct conclusion, but the local symptoms are specific, and if well understood, pathognomonic.

How many can outline the normal position of the liver, spleen, stomach or heart in health? Then why so much percussion and listening in disease? If the liver is displaced into the right iliac region we may

detect it, but if it is enlarged a finger's breadth it is passed over. Where is the normal apex beat felt in health? Can you put your finger exactly on the spot? These things are very simple and easy, but they are of great value in the examination of a sick man.

We have numberless opportunities of learning to palpate the appendix, the kidney, and other organs in health so far as the particular organ is concerned, and we should not let a single opportunity slip. It takes time, and the man who sees 40 patients a day simply sees them nothing more and he can tell very little more about them than a man in Ireland who was born blind. Anything worth while takes time and a careful examination need only be made a few times for any one patient. So then if a man comes in my office with a keloid growth on the back of his head must I listen at his heart, thump his liver, palpate his appendix, introduce a rectal speculum, wash out his stomach, examine his blood, feel his joints, test his urine, try his reflexes and then take a life-size X-ray picture? Not hardly, unless he is the only patient you expect to have for a week, if he is then do all these things and you will have one patient less the next week. The thing to do is to keep your eye and your finger on the keloid until you get his confidence and his promise to let you cut it out; as he gets over the operation you can do all these other things. Never neglect any *reasonable* opportunity to examine any part of the body whether diseased or not, but don't make a fool of yourself because you keep a microscope in a glass case.

Doubtless Deaver can run his hand over an abdomen and feel more things than you can see in a nightmare, and it is because he has examined so many in health as well as in disease.

Mark the perfect man and consider him in all his ways.

Two physicians have been called to the Gubernatorial chair of a State as a result of the last election.

Dr. Alexander Dockery was elected Governor of Missouri. and Dr. J. F. Hill was elected Governor of Maine.

We hope Dr. Dockery will do something for the sanitary relief of Kirksville.

THE St. Louis Medical Gazette has changed its name to The Medical Advertiser. We wish it abundant success under its new name. We notice that it is published in a Trust building, and so stated on the front page. This may prejudice a certain class against it.

BOOK REVIEWS

A Text-Book of Histology, including Microscopic Technic. By A. A. Bohm, M.D., and M. Von Davidoff, M.D., of the Anatomical Institute in Munich. Edited with extensive additions to both text and illustrations, by G. Carl Huber, M.D., Junior Professor of Anatomy and Director of the Histological Laboratory, University of Michigan. Authorized Translation from the Second Revised German Edition, by Herbert H. Cushing, M.D., Demonstrator of Histology and Embryology, Jefferson Medical College, Philadelphia. Cloth, 500 pages, 351 illustrations, \$3.50, net. W. B. Saunders & Co., Philadelphia and London. 1900.

This work presents the subject very fully from both the theoretical and technical standpoints. In the American edition the German work has been improved by the addition of matter and of cuts and the book should prove a valuable one in the teaching of this important subject.

The first fifty pages are devoted to microscopic technic which is described in plain language so that it is easily understood by the beginner. General Histology is then taken up in the consideration of the cell and the tissues. Under Special Histology we have chapters on the Blood and Blood-forming Organs, Heart, Blood Vessels and Lymph Vessels; Circulatory System; Digestive Organs; Organs of Respiration; Genito-Urinary Organs; the Skin and Appendages; the Central Nervous System; the Eye; the Organ of Hearing; Organ of Smell, and some general considerations of the Special Sense Organs. A very helpful addition is the alphabetical arrangement of the references to Literature, by titles and authors, at the end of the text. A complete index closes the volume. The mechanical work is done in superb style and the price is certainly reasonable for such a book.

Sexual Debility in Man, by F. R. Sturgis, M.D., Formerly Professor of Venereal Diseases in the Medical Department of the University of the City of New York; Sometimes Visiting Surgeon to the Venereal Division of the City (charity) Hospital, Blackwell's Island; Member of the American Association of Genito-Urinary Surgeons, etc. Author of "Students' Manual of Venereal Diseases"; one of the Authors of "A System of Legal Medicine." Cloth. 432 pages, \$3.00. E. B. Treat & Co., 241-243 West 23rd St., New York City. 1900.

The author of this work has, for many years, devoted his attention exclusively to Venereal and Genito-Urinary Diseases so

that he is able to speak with authority from a long experience. This book contains the observations of many years and commends itself as a practical and useful work. His opinions on certain things are at variance with ideas generally received in this country, but these opinions are founded upon experience and are worthy of consideration. The chapter on masturbation is well written and the ideas expressed certainly appeal to reason and common sense. Spermatorrhea he separates from pollutions and shows that they are absolutely distinct and separate diseases. Prostatorrhea is clearly described and its distinction from prostatitis is well brought out. The volume is neatly printed and substantially bound in cloth. The references are arranged alphabetically according to authors and a complete index closes the book.

Evans' Obstetrics—A Pocket Text-Book of Obstetrics. By David J. Evans, M.D., Lecturer on Obstetrics and Diseases of Infancy in McGill University Faculty of Medicine, Montreal. In one handsome 12mo. volume of 409 pages, with 149 illustrations, partly in colors. Cloth, \$1.75, net; full flexible leather, \$2.25, net. Lea's Series of Pocket Text-Books. Edited by Bern B. Gallaudet, M.D., Lea Brothers & Co., Philadelphia and New York.

This book is designed for the student and junior practitioner. The physiology of pregnancy and labor is fully dealt with before the pathology is taken up.

Normal labor and the more frequent difficulties have been dealt with at some length, but the rarer conditions have been described only in outline. In this way the contents include only the practical part of the subject, the part of which is absolutely necessary and essential.

The average physician would be better prepared to attend ordinary labor cases if he knew thoroughly a book like this than if he had only a smattering of a dozen more pretentious works.

The Medical News Visiting List for 1901. Weekly (dated, for 30 patients); Monthly (undated, 120 patients per month); Perpetual (undated, for 30 patients weekly per year); and Perpetual (undated, 60 patients weekly per year. The first three styles contain 32 pages of data and 160 pages of blanks. The 60-patient Perpetual consists of 256 pages of blanks. Each style in one wallet-shaped book, with pocket, pencil and rubber. Seal Grain Leather, \$1.25. Thumb-letter Index, 25 cents extra. Philadelphia and New York: Lea Brothers & Co.

The busy doctor needs a convenient visiting list in which to keep the record of his

work, otherwise in the hurry of his everyday life many dollars will be lost. The Medical News' Visiting List with its well arranged blanks will enable him to keep his work written up from day to day.

This list has 32 pages of printed data of the most useful sort for instant reference at a moment's notice. It is issued in four styles, for any system of records. It is printed on fine, tough paper suitable for pen or pencil and bound in a convenient size for the pocket. When desired a thumb-letter index is furnished which will save much time. A book of this kind will save its cost many times over in the course of a year's work, and one should be carried by every doctor whether his practice is large or small.

The Physician's Visiting List (Lindsay & Blakiston's) for 1901. Fiftieth year of its Publication; Leather-covered, Pocket and Pencil, \$1.00. P. Blakiston's Son & Co. 1012 Walnut St., Philadelphia.

This Visiting List was first published in 1851 and through all these years it has served a useful purpose. Year by year it has been improved until it may be said to be perfect. It is as simple as a. b. c. and at the same time complete in every detail of its arrangement.

The book makes a snug flat package which fits easily into the pocket, where it is always ready for use.

Diseases of the Eye by Kent O. Foltz, M.D., Professor of Ophthalmology in the Eclectic Medical Institute, Cincinnati, O. A manual for the use of students and practitioners, 12mo., 566 pp., 193 illustrations, 5 pp. in colors and chromo-lithographic frontispiece. Cloth, price \$2.50, net. The Scudder Brothers Company, Publishers, No. 1009 Plum Street, Cincinnati, Ohio.

In this volume particular attention is given the treatment of diseases of the eye by eclectic medication. It is profusely illustrated, several plates being in colors. Specific diagnosis and specific medication are given special attention.

Quite a number of the remedies are those in ordinary use, the others being peculiar to eclectic practice. Constitutional treatment is given proper emphasis and the local measures are fully developed.

Transactions of the Texas State Medical Association, Thirty-second Annual Session, held at Waco, Texas, April 24th to 27th, 1900. Austin, Van Boekmann, Schultze & Co., Printers. 1900.

The Transactions of the Texas Medical Association comes out in a beautiful volume

of 400 pages as though no storm had happened. The Secretary, Dr. West, lives in Galveston and rendered valuable aid during that awful time of destruction and suffering, but he did not neglect his work as an officer of the Society. Quite a number of first-class papers are presented in this volume. The roll shows 297 members, and to judge from the quality of the work done by the Society, the number should be three times this amount. Dr. Hadra, of Waco, was elected President for 1901 and the meeting will be held in Galveston on the fourth Tuesday in April.

Transactions of the State Medical Society of Wisconsin for the year 1900. M. J. Cantwell, Printer, Madison, Wis.

This is a well-printed volume of nearly 500 pages containing the Transactions of the Society, constitution and by-laws and list of members. The roll shows 559 members and the treasurer's reports leaves \$1,219.47 on hand after paying for a banquet. Among the papers read we notice those of Stengel, Robinson and Richardson as visitors.

The next meeting of the Society will be held at Waukesha in June, 1901, under the Presidency of Dr. J. F. Pritchard, of Manitowoc.

Enlarged Tonsils cured by Medicines, by J. Compton Burnett, M.D., London, England. Cloth, 100 pages, 60c; by mail 65c. Boericke & Tafel, Philadelphia, Pa.

This book gives a fair exposition of the homeopathic treatment of enlarged tonsils.

This is a common disease and those who want to know all the plans of treatment can consult this little volume. A number of cases are reported showing the results of certain remedies.

Report of the Commissioner of Education for the year 1898-99. Volume I. Washington. Government Printing Office. 1900.

There are more than 17 million pupils in the United States and the report of the Commissioner gives a lot of information concerning them. North Carolina expends \$1.17 per capita for white and \$1.03 per capita for colored.

Stringtown On The Pike. A tale of Northernmost Kentucky, by John Uri Lloyd, author of "Etidorhpa" etc. Illustrated, 414 pages, \$1.50. New York. Dodd, Mead & Co. 1900.

We hardly ever think of a scientific man who is thoroughly a master of his specialty becoming a novelist. Mr. Lloyd is well known as a pharmacist and the senior member of the well-known firm of Lloyd Bros.

of Cincinnati, but he has given us a very readable story in "Stringtown On The Pike" for all that. He gives a clear-cut picture of Kentucky and some of her people before and during the war. An old slave-time darkey, "Cupe," is the principal character and his devotion to his master's house and fortune is well told. The author has doubtless studied negroes as well as drugs.

The Parson and the Colonel have an important place in the story, as they should in any well-written Kentucky tale, and the juice of the corn comes in for its share of attention. The book is well gotten up and the illustrations are from photographs.

Brownie, by Amy Le Fenore, author of "Probable Sons," etc.; 4to, 206 pages; profusely illustrated with marginal drawings, \$1.25. American Tract Society; 150 Nassau St., New York.

This is a very interesting story of child life by the well-known author of Probable Sons. Brownie and Buffie are the children of a widow who tries to make her living by writing and their history illustrates the hidden pathos of many an author's life.

No better book could be placed in the hands of the young.

Between Boer and Briton. By Edward Stratemeyer. Cloth. Emblematic cover. Illustrated. by A. Burnham Shute. \$1.25. Boston, Lee & Shepard, Publishers. 1900.

This ought to be *the* juvenile of the year, although it will, of course, be hard to come up to the "Old Glory" books. It enters an entirely new field, and one on which the eyes of the world are centered. It relates the experience of two boys, cousins to each other, one American and the other English, whose fathers are engaged in the Transvaal, one in farming and the other in mining operations. The scene opens in Texas on a cattle ranch, from whence it is transferred to South Africa, where the cousins meet. While the two boys are off on a hunting trip after big game the war between the Boers and Britons suddenly breaks out and while endeavoring to rejoin their parents the boys find themselves placed between hostile armies, and their thrilling experiences are brought out in Mr. Stratemeyer's best style.

The operations of both armies are given from the commencement of the war to the fall of Pretoria, including a rapid sketch of the history of South Africa from its settlement by the Dutch to the present time, all given in a manner to please boys without being tedious. Great care has been given

to the geographical and historical setting, and the book has every element which should make it popular.

Mr. Dooley's Philosophy. Illustrated, by William Nicholson, E. W. Kemble and F. Oppen. Cloth, 260 pages. R. H. Russell, Publisher. New York. 1900.

Many of us have enjoyed Mr. Dooley's papers as they came out in Harper's Weekly, but as they are well worth preserving in book form they have been compiled in this volume. Mr. Dooley gets off some very telling hits on the current events of the day. The humor is fine and well sustained throughout. The review of Roosevelt's book on the Cuban War, Minister Wu, Alcohol as Food, Public Gratitude and the Negro Problem are among the best.

The book will be enjoyed by all who love a good laugh.

LITERARY NOTES.

The Christmas number of the "New Lippincott" Magazine publishes complete Amelia E. Barr's latest and best novel, entitled "Souls of Passage." The author says this story is the fulfillment of twenty years' intention, though only within the last twelve months has she felt that the time was ripe for launching her darling plot. It is certainly the best thing Mrs. Barr has done, not even excepting "The Bow of Orange Ribbon." The title, "Souls of Passage," element shows strongly on one side of the story which deals with picturesque reincarnation. There is a striking psychological incident that one cannot forget, but, above and beyond all, the novel is an intensely human story of Scotland, in which people love or hate, succeed or fail, live or die, in the most genuine sort of manner. The reader will feel a glow of gratitude to the author for writing about educated Glasgow people whose speech is understandable without foot-notes. Surely, humor, love, and pathos gain much by not requiring to be translated. Most of the action of the story takes place at a Highland castle belonging to the Provost of Glasgow, where he takes his family to spend the summer. Here, while the young people are laughing and loving, the Provost and his old friend, Ian Macrae, meet after many years. Macrae is a believer in reincarnation, declaring, "We are Souls of Passage! We are here for a purchase."

Miss Agnes Repplier contributes one of her charming essays, calling it "As Advertised," It hits at the oddnesses of advertisers, past and present, and is witty and

satirical in Miss Repplier's own inimitable way.

Readers of "A Monk from the Ghetto," which appeared in the July number of the "New Lippincott," are eager to see another story by Martha Wolfenstein, and they may now have the opportunity. "An Idyl of the 'Gass'" (Jews' Street!) is in two chapters, and is an amusing story of a Jewish honeymoon.

"As Others See Us," by George Hibbard, is a bright little one-act drama, which may be played by one actor. It is appropriate at the holiday season.

"The Bluffing of Johnny Crapaud," by Patrick Vaux, is a vigorous and unique sea story of an incident that may happen some Christmas night in the twentieth century of England's history as mistress of the sea.

Evelyn Sharp, whose fairy tales are popular with old and young, contributes an example called "The Little Queen and the Gardner," which is delicate, fascinating, and unforgettable.

Two particularly important papers in the Christmas "New Lippincott" are by Lieutenant John Morris Ellicott, U. S. N., and by Henry Charles Lea, LL.D. Lieutenant Ellicott's article is descriptive of the United States Naval War College at Newport, Rhode Island, where, as perhaps few persons realize, imaginary paper battles are fought each summer between the United States and foreign countries by pupils of the school, composed mainly of officers of executive and command rank. Cuts of the battles thus fought, with explanations, add vastly to the paper's interest. Mr. Lee investigates a subject vital to all Freemasons under the title "An Anti-Masonic Mystification." This must command wide attention, coming from so noted a source.

Christmas thoughts and other thoughts are expressed in verse in the "New Lippincott" by William Hurd Hilley, Ella Gilbert Ives, Clarence Urmy, Charles W. Stevenson, Arthur Ketchum, and Susie M. Best.

The "Walnuts and Wine" Department bristles with merry jest and funny happenings in prose and verse.

From the thirteen articles that make up the December issue of The Forum, one may, without invidiousness, choose that by Mr. Henry L. West as likely to attract some attention. Mr. West reviews "The Programme for Congress," and his forecast is luminous and convincing. The Secretary of the Republican National Committee, Hon. Perry S. Heath, enumerates the "Lessons of the Campaign" in

a pardonably exultant tone, and Mr. John Ball Osborne recounts "The Work of the Reciprocity Commissions," which should prove interesting reading for the tariff-tinkers. In distant relation to the latter stands an article by Mr. John P. Young, the managing editor of the San Francisco Chronicle, entitled "The Economic Basis of Protection." In answer to Mr. Eugene T. Chamberlain, the United States Commissioner of Navigation, is an article entitled, "The Development of British shipping," by Mr. Benjamin Taylor, an acknowledged authority on British navigation figures. Mr. J. I. Rodriguez, who was the unofficial adviser in Spanish law to the American Peace Commissioners at Paris, asks: "Can there ever be a Cuban Republic?" in an essay which may possibly foreshadow the course of the Administration in regard to Cuba. The "Progress in Penology" is reviewed at length by ex-Congressman S. J. Barrows, who is now the Corresponding Secretary of the New York Prison Association, and the "burning" question of American Coal for England" is considered by Mr. George C. Locket, who is heavily engaged in England in that important branch of industry. Some of the remaining titles are "America in the Pacific," by Hon. John Barrett, late U. S. Minister to Siam; "The Chinese System of Banking," by Hon. Charles Denby; "Vacation Schools," by Dr. Helen C. Putnam; "The Education of a Millionaire," by Hon. Truxton Beale; and "The Higher Education of Women in France," by Anna Tolman Smith.

The Thanksgiving Number of The Saturday Evening Post is dated November 10. The cover is by Harrison Fisher. The opening article is The Leaders in American Diplomacy, by Honorable John W. Foster, formerly Secretary of State. Honorable Frank A. Vanderlip, Assistant Secretary of the Treasury, contributes The Onward March of American Trade. Hon. Carter H. Harrison, Mayor of Chicago, has an article on The Defacement of the Modern City. Major Arthur Griffiths, of the British Army (Retired), has an anecdotal sketch of General Wolsely. The Adventures of a Pioneer Plainsman are told by Captain John J. Healy. The fiction includes Senate Bill 578, by Brand Whitlock; For Divers Reasons, by Charles Battell Loomis; The Banner Bearer, by Mrs. Burton Harrison; The Diary of a Harvard Freshman, by Charles Macomb Flandrau; Mooswa of the Boundaries, by W. A. Fraser; 'Iggins' East Story, by Joe Lincoln; A Supper by Proxy, by Paul

Laurance Dunbar. There is a half-page poem called *The Ballard of Ozy B. Orr*, by Holman F. Day. The editorial page deals with timely subjects; the department of Men and Women of the hour contains new stories, and the "Publick Occurrences" tell of the efforts to capture South American trade. Frank W. Thomas gives *Confessions of a Mind Reader*; Madeline S. Bridges has a poem called *An Untold Love*; William Mathews contributes *The Matter-of-Fact Man*. The other departments are *Literary News* and *Oddities of Science*.

The Christmas Number of Scribner's Magazine shows three different kinds of color-printing. The cover is an elaborate design by Maxfield Parrish, which it has taken nine printings to reproduce. The frontispiece is a delicate reproduction in color of a painting of a mother and child by Jessie Willcox Smith, and, in the body of the magazine, in a very illuminating article by the distinguished art critic, John La Farge, on "Puis de Chavannes," are six full-page pictures of some famous decorative paintings by Puvis. These have been most faithfully reproduced in the colors of the originals.

Eight illustrated short stories, showing great variety in subject, are included in the number.

Frank R. Stockton contributes one of his most amusing conceits, entitled "*The Vice-Consort*," which is the story of a woman who was chosen for the second wife of their husbands by fond but jealous wives.

Henry van Dyke tells a story of the *Hudson Bay* region in which the chief character is a misunderstood dog, named "Pichou."

Thomas Bailey Aldrich, whose fiction is seldom seen of late, contributes "*An Untold Story*"—a romantic incident connected with Budapest.

"*The Lion's Mouth*" is a farcial comedy of modern New York, by Alice Duer and Henry Wise Miller.

"*Johnny Bear*" is another animal story by Ernest Seton-Thompson, which gives the adventures of a bear-cub in *Yellowstone Park*. It is fully illustrated with the author's own drawings.

"*The Emigrant East*," by Arthur Colton, is a story of an old bookworm and his niece, and two lovers, who are firemen, living in the engine-house near by.

"*The Woman That Understood*," by Octave Thanet, is the tale of a sentimental friendship.

"*The Crane*," by Francis Churchill

Williams, is a romance which centres around the driver of a great crane in a steel mill.

The artists who illustrate these stories are the best among modern illustrators, and include Keller, Christy, Chapman, Guerin, Ilutt, Carleton, and Miss Jessie Willcox Smith.

W. C. Brownell, the essayist contributes a most appreciative criticism of George Eliot's fiction, calling attention to the recent neglect of that writer, and speculating as to the causes of it.

Frank Fowler, the artist, discusses "Portrait Painting and the State."

The poetry of the number is contributed by the late Richard Hovey, Gertrude Hall, William Vaughn Moody, and Bertha G. Woods.

There is a Christmas "Point of View," by E. S. Martin.

In the December Review of Reviews the editor comments on several important questions of the hour, including the new army bill, the problem of reapportionment in the South, the Isthmian Canal, and other matters that will engage the attention of Congress at the approaching session; the results of the census of 1900, with reference to the proposed admission of new States and representation in Congress; the meaning of the national election; the Cuban Constitutional Convention; the elections in Porto Rico and Hawaii; the Liberal victories in Canada and Newfoundland; the Chinese negotiations, and European politics, both internal and international. Among the contributed features are articles on "The Cuban Republic—Limited," by Walter Wellman; "Governor-elect Odell, of New York," by Dr. Lymann Abbott and "Marcus Daly, Empire-Builder," by Samuel E. Moffett. There is also an interesting chronology of the career of William McKinley, the eighth President to be reelected for a second consecutive term.

ABSTRACTS of the One Hundred Leading Articles of the Month.

Alcohol in Saline Solutions.

J. Rilus Eastman, in the Cincinnati Lancet-Clinic for November 3d, recommends, in certain cases, the subcutaneous injection of alcohol in saline solution.

The salt solution containing whiskey he says has given more prompt and certain results than the plain salt solution. The whiskey is diluted with water to a one in

twenty solution, and this is rendered physiologically saline by the addition of salt. In toxemias he thinks the whiskey solution worthy of trial where the condition of the patient will not allow of its introduction by any of the common routes.

Acute Senile Endometritis.

In the American Journal of Obstetrics for November, L. H. Dunning says that the treatment of acute senile endometritis must, to some extent, depend upon the intensity of the inflammation and the extent of the secondary lesions.

Where the appendages have not become involved a thorough dilatation of the cervical canal, douching the uterine cavity with an antiseptic solution, a careful yet thorough curettement with the sharp curette, the application of a caustic such as acetic acid or pure carbolic acid followed by alcohol, and finally establishing and maintaining good drainage, will result in a cure in most instances. In one case of large pelvic abscess complicating the disease a cure was effected by curetting the uterus and draining the abscess through a vaginal incision.

If there be retroversion this displacement must be corrected by appropriate means, and if the remnants of a sloughing fibroid be found it must be removed. This can usually be accomplished by a sharp curette. If it cannot so be removed a vaginal hysterectomy may be resorted to.

Should the uterine appendages be found markedly diseased they should be extirpated, as well as the uterus, by the vaginal route.

Adenoids in Deaf-Mutism.

In Treatment for October Macleod Yearsley advocates the removal of adenoids in every case of deaf-mutism.

He says that in cases of acquired deaf-mutism due to deafness from primary ear diseases, their removal, even if it does not appreciably benefit the aural condition, places the patient in a more advantageous position for further treatment. In many cases where the hearing is in abeyance from disease depending on the adenoids, *e. g.*, in children who are very deaf from chronic non-suppurative middle-ear disease, and are consequently, whether the result is contributed to by wanton parental neglect or no, unable to learn to talk, the removal of the adenoids will mean the removal of the obstacle to education.

In cases in which, from serious and severe exanthematous panotitis or in those cases in which the labyrinth is impaired or destroy-

ed from acute infectious disease, without much implication of the tympanic cavity and its contents, the removal of adenoids (if present) will, by improving the general health, the nasal respiration, and consequently the cerebation of the patient, place it in a far better position for education by lip-reading than if the growths were allowed to remain.

In cases of congenital deaf-mutism due to developmental errors, either central, peripheral, or of the connecting structures, the removal of adenoids (when present) should be advocated for the same reasons as those just given.

Anesthesia.

A. W. Morton, in the Pacific Medical Journal for November, reports ten cases operated on under cocaine anesthesia of the spine. Two were cases of, hernia, three of ulcer, one labor in a primipara, one fistula in anus and piles, one necrosed tibia and lipoma, one varicose veins, one ischio-rectal abscess.

Before making the puncture he uses a spray of chloride of ethyl, which prevents the pain of the needle passing through the skin and keeps the patient quiet. He concludes that cocaine thus administered is the safest, quickest, cheapest and best anesthetic, but says that it will take thousands of cases to demonstrate its safety.

Blindness.

Walter B. Johnson, in the Medical Times for November, writes of the prevention of blindness by the adoption of laws compelling hygienic precautions.

Blindness or impaired ocular function may be due to ophthalmia neonatorum, purulent ophthalmia, trachoma, contagious or infectious diseases, traumatism and poisoning and refractive errors. From 30 to 40 per cent. of blindness from such causes is preventable. These diseases should be under the control of the health boards.

He quotes the law of New Jersey which requires that every case of inflamed eyes in infants shall be reported to the local board of health and placed at once under the care of a competent physician.

The methods which have been adopted as the result of the enactment of laws which have made compulsory hygienic precautions, have resulted in a diminution of the number of the blind. This has been demonstrated by the decrease in the number of the blind shown in the census returns compiled during the past forty or fifty years in the United States and in other countries.

The enactment of laws which are inoperative is of no public service. The tendency to ineffective laws of this class is shown in the laws enacted which provide for supervisors. The enactment of any measures for the prevention of the spread of disease will not be effective unless they specifically provide for report to and supervision of all cases of either contagious or infectious diseases by the Board of Health, or some specially appointed competent supervisor or inspector. The danger of conflict and disagreement between the control boards of institutions and the health boards or inspectors might be easily overcome, if the duties of each are strictly confined to their respective departments. Each board could be of assistance to the other and the public service greatly enhanced in value. Supervision in the hygienic department by specially qualified officers is an absolute necessity, and if such officers are not in full charge, regardless of the board or body of directors who are in immediate control of the buildings in use and their inhabitants, laws which are enacted for the prevention of the spread of disease must either result in failure, and be absolutely inoperative, or at the best be spasmodic in their action and effect.

Chronic Parenchymatous Nephritis.

Frank Billings, in a clinical lecture reported in the Medical Standard for November, says that the treatment of chronic parenchymatous nephritis is chiefly hygienic. In regard to food it may be necessary to allow some animal food in certain cases. The heart must be carefully fed. Milk he says is the best form of food. Plenty of water should be drunk, warm clothing to prevent sudden changes—wool is the best. Keep the bowels open with saline water. Iron and arsenic useful if there is anemia. Digitalis is useful if the blood pressure is low. If the heart is very much weakened and degenerated it should not be used.

For convulsions, use chloroform, croton oil, elaterine, hot pack, pilocarpine with care, cups and poultices.

Blood Examination for Diagnostic Purposes.

J. W. Brandeis, in the Journal of the American Medical Association for November 24th, writes of the value of blood examination for diagnostic purposes.

It is an important aid in differentiating chlorosis from secondary anemia.

Chlorosis from pernicious anemia. The reduction of red cells and hemoglobin is

rarely as great in the former as in the latter, and the degeneration of the erythrocytes is more severe in pernicious anemia. The color-index is less than one in chlorosis and greater than one in pernicious anemia. Myelocytes and megaloblasts are regular features in pernicious anemia, but their occurrence in chlorosis is extremely rare.

Pernicious anemia from the anemia of malignant disease. From the anemia of malignant disease, as well as those that follow syphilis, typhoid fever and malaria of severe type, the following points serve to distinguish pernicious anemia: the large number of megaloblasts; the greater size of the erythrocytes, and the color-index greater than one; the absence of leucocytosis.

Leukemia from Hodgkin's disease. In the latter disease the blood shows, at most, a secondary anemia, which is easily distinguished from the blood of leukemia.

Leukemia from tumors of the spleen or kidneys.

Leukemia from tubercular, syphilitic or malignant adenitis. The blood examinations of the affections contrasted with leukemia do not show the changes of the blood of that disease.

Syphilitic from tubercular or malignant disease. As stated by Cabot, in adults a leucocytosis, marked by an increased percentage of young leucocytes and eosinophiles, points to a diagnosis of syphilis as against tubercular or malignant disease.

Typhoid fever from malaria. Paroxysmal hemoglobinuria from malaria. Pneumonia from malaria. The finding of the plasmodium malariae settles the diagnosis.

Malignant liver disease from other liver disease. Puerperal sepsis from puerperal mania. Renal or cardiac from bronchial asthma. According to the teachings of Neusser and his followers, an eosinophilia would point to the presence of the second as opposed to the first of the diseases in each couplet.

Hysteria and neurasthenia from many of the diseases which they simulate. The finding of normal blood where we could expect to encounter certain pathological changes serves readily to make the distinction here.

Gastric ulcer from gastric cancer. The occurrence of a digestive leucocytosis points to the former.

It is obvious what an aid may be rendered by blood examination in obscure abdominal cases, for the presence of a leucocytosis would point to: Appendicitis as against typhoid. Appendicitis as against intestinal, biliary or renal colic, or floating kid-

ney. Peritonitis as against tubercular peritonitis. Malignant disease of the liver as against catarrhal jaundice. Perinephritic abscess as against cyst of the kidney.

In doubtful pelvic cases the absence of leucocytosis excludes the presence of pus or hemorrhage, and, in general, the mere existence of a leucocytosis would suggest the first as opposed to the second of each of the following couplets: Pneumonia and typhoid. Pyemia or septicemia and typhoid. Meningitis and typhoid. Meningitis and brain tumor, lead encephalopathy, diabetic coma, sunstroke, narcotic or alcoholic intoxication. (Cabot.) Pneumonia and uncomplicated grippé. Scarlatina and measles. Empyema or pneumonia and serous pleurisy.

Consumption.

In the Maryland Medical Journal for November, Edward M. Schaeffer writes of the white death and the sanatorium or school for consumptives. He thinks that prevention is better than cure, and this can be brought about through sanitation and the practical teaching of hygiene to the young.

He incorporates in his paper a translation in abstract of an address on the treatment of pulmonary tuberculosis by Albert Fraenkel before the Heidelberg Medical Society.

In regard to the treatment of hemorrhage he says that no matter what the origin or source of the hemorrhage, the text-books generally recommend ergot by the mouth or ergotin hypodermically, with the sole and certain result of a disturbance of digestion or a possible abscess. As to any direct or indirect influence on the hemorrhagic site, there is nothing to be said. Pharmacological experiments have long since taught us that the physiological effect of ergotin on the lung consists merely in contracting the blood-vessels, and where this occurs there is also danger of increased blood pressure and gangrene. Because ergot checks atonic bleeding from the uterus through its oxytotoxic properties, should it also be applicable to pulmonary hemorrhage? For years he has used no other treatment in hemorrhage than psychological quieting of the patient, rest in bed, and palliatives for an irritable cough; finally, when the heart is weak and rapid, digitalis, and, at critical times, ligature of the extremities and subcutaneous salt infusions.

It is not his custom to keep the patient for days or weeks on cold and liquid nourishment. What possible styptic influence on a bleeding lung can cold drinks and ice

in the stomach exert, or how can lukewarm food increase blood pressure more than cold?

Liquid nourishment is used to spare the patient the necessity of sitting up and chewing. The sucking of ice is helpful in irritation of the throat. Ice bladders on the lungs have only an immobilizing effect, and are better applied over the heart itself. As a means of subduing cough, where a quick result is desirable, morphia hypodermically holds a sovereign place. Codein is to be preferred for continued use, beginning with 4-5 cgm. doses, but only against coughs which are purely irritative and disturb the night's rest.

Colotomy.

W. H. Link, in the Medical and Surgical Monitor for November, recommends colotomy where there is complete occlusion of the anus, rectum or lower sigmoid by an inoperable malignant growth.

He reports one case in which the operation was done for rectal cancer in a young man 19 years of age. The operation was done in two stages, and the patient had great relief from pain.

He says that any one with any experience in abdominal surgery can do the operation. When done in two stages it is far easier than the simplest case of appendicitis. The bowel is brought out and fastened in the wound and after waiting four days it is opened without danger of infection.

Corning's Anesthesia.

Corning's method of inducing anesthesia of the lower half of the body by intraspinal injection of cocaine is now being used very extensively.

S. Ormand Goldan and J. B. Murphy each have a paper on this subject in the Medical News for November 10th. Goldan says that cocaine introduced into the subarachnoid space acts in the same way as it does when injected into the general circulation, being, possibly, less toxic.

There is no definite quantity which will answer in all cases. Some are easily influenced by small doses, whereas others require large amounts to produce the desired effect.

Temperament, type of patient, and condition of health do not seem to influence the action of the drug. Large, healthy individuals are often affected by small doses, whereas the sickly, emaciated types often require second injections to produce anesthesia.

There is no method of determining how

any particular dose will act in a particular case.

Large doses should never be used until the individual susceptibility is determined.

In the order of safety of anesthetics he places Corning's method last. He thinks it is even more dangerous than chloroform alone. Those who use chloroform alone every day without the least unpleasant effect may start at this.

Murphy reports 25 cases since his return from Paris in which the method was used with good effect. He tells us to be sure the solution is fresh and that the needle does not slip from the dura.

Casts Without Albumin and Catarrhal Nephritis.

L. L. Skelton in the Chicago Clinic for November reports 12 cases of casts without albumin out of 23 consecutive cases in private practice. Three of the 12 cases were of cirrhosis of the kidney and albumin had been present at previous stages of the disease. The other nine failed to give any history of albuminuria. These casts, he says, are an expression of an irritated kidney and occur in the following classes of cases.

(1) Cases where the irritant is insoluble, crystalline substances separated from the urine in the kidney and mechanically irritating the tubules and pelvis of the kidney. These irritants are uric acid, calcium oxalate, cystin, acid calcium phosphate, acid ammonium and sodium urate. These comprise a numerous class of cases and, as the underlying condition is constitutional, are not permanently relivable. They continue to recite their aches and woes to the physician, and return again and again to receive relief and listen to his lecture on dietetics and hygiene, if, perchance, they escape the more serious consequences of stone, pyelitis and pyonephrosis. (2) Cases where the irritant is soluble and has its origin in an auto-intoxication largely intestinal. These also are likely to be chronic in character. They keep their kidneys on the verge of inflammation by abuses in eating and drinking, and are hardly well cleared of their toxins before they are reminded by their sluggishness, irritability and dull ache that they again need attention. (3) Cases acute in course, accompanying the elimination of the toxins of infectious diseases—pneumonia, typhoid, measles, scarlet fever, erysipelas, malaria, acute rheumatism, tuberculosis, etc. In these cases, however, the inflammation frequently does not stop at the catarrhal stage, but passes on to the exudative stage

with albuminuria. Here the catarrhal cast simply means that it is necessary to guard the over-worked kidney in order to ward off further damage, but frequently the physician is concerned with more obstrusive symptoms. (4) Cases accompanying the elimination of various foreign substances. Sugar and bile irritate the kidney, as well as concentrated acid urine, drugs, as phenols, volatile oils, arsenic, mercury, cantharides, etc. The frequency of the use of phenols, balsams and mercury accounts for this rather numerous class of cases, and as these drugs are frequently given for other genito-urinary affections, the disturbances from the drugs are attributed to the original affections. (5) Cases where the irritant is situated lower in the urinary tract and the infection is just beginning to involve the kidney. These cases are frequently accompanied by pyuria, but the albuminuria is usually not greater than the pus would account for. (6) Cases of uncompensated heart diseases, where the failure in the circulation has not reached the stage accompanied by physical signs. In hepatic obstruction to the circulation and in abdominal tumors, here the failure of circulation is the cause of the catarrhal nephritis and precedes and merges into cyanotic induration.

Dry, Sterilized Catgut.

J. H. Carstens, in the Indiana Medical Journal for November, says that he has found something wrong with all the chemically prepared catgut. He prefers the dry, sterile catgut in paper envelopes; no contamination can take place so long as they are kept dry.

He prepares the catgut himself in the following manner:

The catgut is put in ether for a few days or a week, till the fat is all removed, and then cut in strips of eighteen or twenty inches long. Three of these are wrapped in fine tissue paper. This is then placed in the Boerckmann sterilizer and subject to dry heat for three hours. The thermometer is kept in the apparatus so that you can see that the heat is at least 300 degrees. At the expiration of that time the heat is shut off and the ligatures remain in the apparatus without disturbance for twelve to eighteen hours, which gives any spores that may be present an opportunity to develop. Then the heat is again used and the ligatures are subject to another 300 degrees.

He concludes that—

All buried sutures ought to be absorbable.

All absorbable ligatures must be absolutely sterile.

Chemicalized sutures are no more sterile than plain sutures.

A suture that is chemicalized is harder and remains longer in the tissues.

This latter is no advantage, but a disadvantage. If in a special case it is desirable that a suture should remain longer, dry sterilized kangaroo tendon can be used.

Diseases of the Throat and Nose.

Gilbert D. Murray, in the Laryngoscope for October, presents some observations upon the common diseases of the throat and of the naso- and oro-pharynx.

After some general considerations he concludes,

That teeth should receive attention from infancy, in order that caries may not invite forty-two different kinds of micro-organisms.

That the mouth is the primary cause of many throat troubles, and ought to receive treatment simultaneously with the throat.

That there is a quality of mildly offensive breath, which arises from micro-organisms present in the mouth, throat, naso- and oro-pharynx.

That bad taste in the mouth, particularly before meals, suggests infection of the tonsils, naso- and oro-pharynx.

Diseased tonsils, *not necessarily enlarged* and often *hidden*, no longer act as a barrier to disease, but rather as a germ incubator, and the diseased outer surface ought to be removed.

That the term rheumatic sore throat should be used with less freedom.

That the vicious habit of a mother tasting her child's food before giving it to the child, should be preached against.

For the same reason all instruments, drinking utensils, should be carefully cleansed before use.

That the coating of the tongue, which is often local in origin, should be removed as systematically as the tartar from the teeth.

Displacements of the Uterus.

Chas. L. Bonifield, in the Cincinnati Lancet-Clinic for November 24th, says that the treatment of retrodeviations of the uterus is not satisfactory, therefore prophylaxis is of great importance.

Many cases may be cured without surgery if well-recognized and time-tried methods be carefully and perseveringly used.

Many more cases may be cured by a combination of these methods with repair of cervix and perineum.

The Alexander operation may be done to avoid prolonged local treatment when

the uterus is movable, and there is no prolapse of ovaries, or when reposition of the uterus pulls them into place.

Adhesions and ovarian prolapse are best treated through an abdominal incision in the median line. When it is found necessary to remove the appendages, ventrosuspension is the operation to be done; when pregnancy is possible shortening of the round ligaments is preferable.

Diphtheria Bacilli in Healthy Throats and Noses.

Francis P. Deny, in the Boston Medical and Surgical Journal for November 22d reports several cases in which the diphtheria bacilli were found in the throat and nose of healthy persons.

He says that diphtheria bacilli are seldom found in the throat of those who have not been exposed to diphtheria.

The bacilli are more frequently found in those who have been exposed, especially in persons living under poor hygienic conditions or in institutions.

The conditions of institution life which favor the growth of the bacilli in healthy throats are the living together of a large number of persons in a limited air space.

Healthy individuals with virulent bacilli in their throats can spread the disease. They are just as dangerous as mild or convalescent cases of diphtheria, and ought, therefore, to be detected and isolated.

Cultures ought to be made among those who have been exposed to diphtheria: (a) By physicians among the members of a family who have been exposed; (b) by inspectors in the schools; (c) by healthy officers under any circumstances when they think the disease is being or may be spread by such individuals.

Delirium Tremens in Moderate Consumers of Alcohol.

Frank H. Pritchard, in the Quarterly Journal of Inebriety for October discusses delirium in moderate consumers of alcohol.

He says that such cases are usually uremic and through the moderate consumption of alcohol, and especially of beer, the kidneys are undergoing parenchymatous degeneration.

He quotes the conclusions of Hertz that a renal disturbance is a constant accompaniment of uncomplicated delirium tremens.

That the relation of time between the renal disturbance and the appearance of the delirium shows that the renal disease is primary and the delirium secondary.

That the anatomical base of the renal dis-

turbance is an acute nephritis, which, as a rule, probably develops without any preceding chronic nephritis.

That the course of the renal disturbance follows so closely, step by step, with the delirium that there is good ground for assuming that there is a genetic connection between the two phenomena.

That there are so many similar points in the two states which are notoriously brought about by an insufficiency of the renal functions (uræmia), and delirium tremens, that there is reason to assume that the delirium is an acute auto-intoxication-psychosis as a consequence of the insufficient kidney function, which is due to the acute nephritis.

That the peculiar form that this psychosis takes on is dependent upon its developing in chronic alcoholics.

Finally, that there is a probability that delirium tremens in pneumonia is dependent not on the pneumo-toxines directly, but the always present renal lesion.

Ether Anesthesia.

Just why so many well-informed people will keep on using ether when they can get the safer and more convenient chloroform we do not know. T. A. Reamy, in the Medical News for November 10th, says that bronchial disease is not invariably a contraindication for ether anesthesia in abdominal surgery, but he should have added that vomiting and disordered kidneys are.

He gives his patients coffee and cream three hours before the operation, four grains of calomel an hour before, and unless there are contraindications 1-6 grain of morphia and 1-200 of atropine (the printer has it 1-20 of atropine and the proof-reader let it go at that) twenty minutes before the commencement of anesthesia.

He says the operating room should be heated to 98 to 100 F. To be comfortable at that temperature the surgeon should only wear a sterilized towel.

To get the best results he emphasizes the following points: Proper preparation of the patient; preparation of the operating room, with the temperature at 98 to 100; pure ether; a proper inhaler; proper method of administration; due precautions against exposure of the patient in removing from the operating room; temperature of the patient's room should be from 80 to 90 for several hours after operation; proper care of the patient during convalescence, she should be given plenty of water to drink and the bowels kept open.

We can beat the whole lay out with an old newspaper and four ounces of chloroform.

Estivo-Autumnal Malarial Fever.

Chas. F. Draig in the Journal of the American Medical Association for November 3d, reports some typical cases of quotidian and tertian forms of estivo-autumnal malaria.

The tertian parasite differs from the quotidian in the following particulars:

During the hyaline stage: the rings are larger, being from $\frac{1}{4}$ to $\frac{1}{2}$ the size of the infected corpuscle; the signet-ring shape; the sluggish ameboid motion; the clear-cut and refractive outline; the less wrinkled and lighter green infected corpuscle; the occurrence of only one parasite in the infected corpuscle.

During the pigmented stage: larger size, $\frac{1}{2}$ of corpuscle; the pigmented ring form; the continuance of ameboid motion; more sharply defined and refractive, and the granular protoplasm; the finely granular pigment, which is motile; the occurrence of only one parasite in a corpuscle and the lighter colored, seldom crenated infected corpuscle.

During the segmenting stage: the occurrence of segmentation outside the corpuscle; the number of segments, ten to fifteen.

The larger, more narrow, more deeply pigmented crescents seldom showing a double outline.

The cycle of development, forty-eight hours.

Climatic Treatment of Phthisis.

W. H. Swan, in the Boston Medical and Surgical Journal for November 1st, gives some good advice in regard to sending patients away from home in treating phthisis.

Do not send patients with far advanced phthisis to Colorado, unless they are able to make the change without serious fatigue, and unless they can live here in the manner they should and for a *prolonged period*.

Do not send *early* cases, unless there are assured means for proper hygienic living for a period sufficiently long to get the patient well enough to earn, in part at least, his living, and to find employment. How long will depend upon the individual case and his progress, but, roughly speaking, three or four months at least. There are many openings for employment, but more people looking for the desirable ones.

Most important of all, instruct the invalid to rest and *keep* quiet after his arrival until some one competent to advise him considers it safe to begin to exercise; and then have his manner of life and hygiene directed from time to time, according to his progress and condition.

Comparative Value of Laboratory and Bed-side Diagnoses.

E. C. Levy, in the Virginia Medical Semi-Monthly for November 9th, discusses the seeming antagonism between laboratory workers and clinicians. He says that practitioners should possess sufficient knowledge of laboratory methods to apply them for themselves in simple cases, but

Here, as in all specialties, the general practitioner should promptly recognize the cases which are beyond his own skill and refer them to an expert.

The practitioner may simply send material for examination where the nature of the required investigation is clear and where the character of the material permits, but he should at least know and follow the proper method for its collection and preservation, or, not knowing it, should take no step without informing himself on this point.

A brief history, containing only salient points, together with the apparent clinical diagnosis, should, if possible, accompany all specimens.

The laboratorian should be called in as a regular consultant in those cases in which the diagnosis is very obscure, and should be given full scope to make examinations in whatever direction he may deem best.

The laboratory is recognized by nearly all recent graduates in medicine, and by most of the older members of our profession, as a necessary adjuvant to their bed-side methods of diagnosis. It is unfortunate, and somewhat difficult to understand, why antagonism between the two methods should be assumed in the minds of some. The true attitude of the profession should be to regard the methods as mutually indispensable. The laboratory would be of little use without bed-side observation; for only thus is brought out the line along which the laboratory investigation should be conducted, while the helplessness of clinical methods, in many cases, when used alone, can be no more convincingly shown than by directing attention to the very fact that the laboratory is so often called upon for assistance. Let the practitioner realize, as some fail to do, that laboratory work is as much a specialty as any connected with the medical profession; and let him also realize, as still others fail to do, that neither the laboratory worker nor his brother specialists place themselves upon a plane above that of the competent general practitioner, but, filled with honest admiration for him, they have taken up cognate branches, in which they are in position to furnish him, when occasion arises, with

indispensable assistance in the furthering of his noble work—the relief of suffering humanity.

Capillary Bronchitis Treated by Inhalation of Chloride of Ammonia.

In the Medical Bulletin for November, Ephraim Cutter reports a case of capillary bronchitis in a girl of 8 years cured by the passive inhalation of nascent chloride of ammonia.

Pour a teaspoonful of liquor ammonia on an old towel. Then pour a teaspoonful of fresh hydrochloric acid (the commercial is good enough) on another old towel. With one towel in one hand and the other towel in the other hand briskly wave them in a small closed room containing the patient. If the chemicals are good the air will be loaded with the snow-flake crystals of NH_4Cl , which, as aforesaid, will be passively inhaled by the patients in said room. This is an admirable method for newborn babes or adults who cannot swallow or are too weak to breathe through an inhaler.

This treatment was carried out three times a day for a month, the patient improving all the while. The author closes with a biblical reference.

Cesarian Section,

In the Nashville Journal of Medicine and Surgery for November, E. P. Davis writes of the modern cesarian section.

He gives his experience in 14 cases.

In two cases, the mothers being uninfected, the mothers and children recovered; in one case there was a tubercular sinus of the hip-joint, contracted pelvis and eclampsia. The child was dead, and the mother almost moribund when the operation began; she revived afterward and lived for three or four days. In eight cases in which there was no infection the uterus was removed, all mothers and children recovering. In two infected cases, one child was saved. In one case in which the mother had just died a living child was extracted which lived for two weeks. In his experience cesarian section has no infant mortality and in this respect section is far superior to the induction of labor at any period of gestation.

Cancer of the Uterus.

Bryon B. Davis, in the Medical Fortnightly for November 10th, asks how can the mortality of cancer of the uterus be reduced.

In answering this question he says that

the prophylaxis of cancer of the uterus is to a limited degree possible.

The mortality of uterine carcinoma continues very high because the diagnosis and operation are so late.

Earlier diagnosis is possible by methods already understood.

The earlier the operation the less will be the operative mortality.

Carcinoma being primarily local, if the ideal could be realized of making the diagnosis and operation in all cases while the disease is confined to the uterus, there would be no recurrences.

Chronic Copper Poisoning.

Henry A. Kurth in the Medical Record for November 10th, says that in order to understand the pathology of copper poisoning it is necessary to recall the physiological action.

Locally copper is both an astringent and an irritant. Constitutionally it is an agent promoting waste. Its astringent and irritant action come into play at its entrance into as well as at its expulsion from the body. Its action promoting waste comes into play during its passage through the tissues of the body.

In the respiratory tract the irritant action seems to predominate. The nose, pharynx, larynx, trachea, and bronchi are intensely congested. The parenchyma of the lungs is probably at first also congested. Sooner or later, however, there is destruction of the epithelium of the bronchioles and air vesicles with the formation of new connective tissue. The lungs being thus far crippled offer an excellent field for pathogenic germs, notably streptococci and tubercle bacilli. Consequently most of these cases end in purulent bronchitis, or phthisis, or both. The part of the lungs not consolidated then takes on compensatory emphysema. The stomach being the chief port of entry of the copper suffers proportionately. At first there is a simple chronic atrophy of the mucous membrane. Cases of such complete loss of digestive power as one finds among old copper workers one rarely meets elsewhere. In the intestines we find no constant lesion. This seems to be due to the fact that the activity of the copper is largely used up in the stomach. The liver is the principal storage-place for the copper. Its normal functions are generally somewhat interfered with. Gross lesions (cirrhosis) are rare. The spleen is enlarged in most cases, but is in no way characteristic of the disease. The blood, important as it is, has not been studied sufficiently to warrant any state-

ment, except that the copper combines with the hæmoglobin of the red blood corpuscles and so diminishes their usefulness. The arthritic diathesis one frequently finds among lead workers is not found among copper workers. For this reason any attempt to explain copper poisoning as analogous to lead poisoning will fail. It will be remembered that a large portion of the copper is eliminated by the kidneys. We would naturally expect these organs sooner or later to become the seat of a chronic inflammation, especially interstitial nephritis. This, however, is not common, and the kidneys give but little trouble. This is another instance in which lead and copper do not act alike. On the nerves copper acts as an irritant, and this action is responsible for a great many symptoms. Some authors claim that copper causes various forms of neuritis, paraplegia, paralysis agitans, and even locomotor ataxia, but they have failed to exclude alcoholism and irregular living as causative factors.

Cough in Influenza Simulating Whooping Cough.

F. Forchheimer, in the Archives of Pediatrics for November, describes a cough in influenza which is rather hard to differentiate from whooping cough. The principal points in the diagnosis are the association with a general epidemic of influenza, that it attacks adults as well as children, and former attacks of whooping cough did not protect.

The treatment is full doses of quinine, phenacetin, codeine, and in some cases belladonna.

Diabetes Mellitus.

Diabetes mellitus, says R. Alexander Bates, in the Atlanta Journal-Record of Medicine for November, is a disease of malassimilation in which deficient oxidation directly or indirectly permits the accumulation of sugar in the blood. If sugar accumulate in the blood in a proportion greater than three parts per thousand, it is excreted in the urine. Diabetes may result either from overproduction of sugar or from diminished oxygenation.

The treatment demands attention to the primary cause and the use of such dietetic, hygienic and therapeutic measures as promote oxidation and assimilation, and overcome arterial tension. Antilitheic diet must be persisted in. Alkalies are most useful to control the diabetic coma. Under the antilitheic treatment he says that pa-

tients excrete less sugar, miss the polyuria, furunculosis, thirst, emaciation, pruritus and the severer symptoms generally, and life is prolonged.

Difficult Labor Caused by Dropsy of the Child.

In Obstetrics for October, Carl Weidner reports a case of difficult labor caused by the great size of the abdomen of the child.

The labor went on very well until the head came low in the pelvis, forceps were used and the head delivered, but even with great traction the body of the child stuck fast.

The writer says he was afraid of pulling the head off, so he brought down the arms, and after some difficulty the body was delivered. The child was extensively edematous, particularly so about the abdomen, with much distention. The body measured 24 inches around the abdomen, and it was this enormous abdomen that caused the difficult delivery. There was a large amount of amniotic fluid, and the placenta was large and soft.

The mother had a considerable edema in a previous pregnancy with miscarriage at the eighth month, but there was no edema of the fetus.

Diabetes Mellitus in Children.

Leopold F. W. Haas reports two cases of diabetes mellitus in children in the Journal of the American Medical Association for November 17th.

He says that diabetes occurs more frequently in children than is generally supposed.

Urinalysis is just as important an element in the scientific diagnosis of disease in children as it is in adults. It is to be regretted that the general practitioner rarely realizes this fact.

There is a possible etiologic connection between peliosis rheumatica and diabetes. The pathogenesis of both conditions is so obscure, however, that speculation on this question can only point out a direction for further research.

Ectopic Pregnancy.

The diagnosis of ectopic pregnancy before rupture is confessedly difficult, in fact, Lawson Tait held that it was impossible. However, J. F. Baldwin, in the Columbus Medical Journal for October, reports eleven cases in which a presumptive working diagnosis was made before rupture.

He says that there are no pathognomonic symptoms of tubal pregnancy or of any

other form of ectopic pregnancy. Usually, however, we find the following points:

The patient gives a history of several years of sterility (many exceptions); she has missed a menstrual period, perhaps two of them (numerous exceptions); she has noticed some unusual pains in the pelvis, which she will probably describe as boring, gripping or colicky in character, these pains being situated usually in the region of an ovary; she has perhaps within a few days of the time of consulting her physician had a more or less irregular hemorrhage; perhaps has discharged pieces of membrane which she supposed indicated an abortion, and consults her physician with the idea that such is the case, owing to the hemorrhage and the pain and the suspicion of an existing pregnancy. Possibly, however, there has been no suspicion of a pregnancy, as the woman has accepted her sterility as incurable and has dismissed from her mind such a possibility.

On making a vaginal examination, if the conditions are at all favorable, the examiner will find upon one side or the other of the uterus, or back of it, a fusiform, quite well-defined cystic tumor, of about the size of a pullet's egg or a little larger. This tumor will probably be quite tender on pressure, will be quite symmetrical in outline, and will usually be distinctly pulsating. When such a tumor is found in a woman in whom we have reasonable grounds to suspect a pregnancy; when the uterus at the same time is found somewhat enlarged as much as we would expect in a pregnancy of so long continuance as the history indicates, a presumptive diagnosis of tubal pregnancy is warranted, and the matter of an operation should be carefully and without delay considered.

Excision of the External Carotid Artery in Malignant Diseases of the Face.

W. P. Nicholson read a paper before the Southern Surgical Association on the Excision of the External Carotid Artery in cases of inoperable malignant diseases of the face. He reported two cases upon which operation had been recently done.

The first case was a sarcoma of the nose which began apparently as a polypus about eight months before. This was removed several times, but recurred promptly after each removal. When seen a few weeks before the operation this had extended sufficiently to completely obstruct the nose and cause great pain by constant pressure. At the time of operation this had progressed in a few weeks only so that the growth pressing under the orbit had forced the

right eye out of position and there has been also an extension upon the forehead upon the left side. The patient suffered internal pain which required constant use of morphine for its relief. The right common carotid was excised on October 3rd, and the wound healed promptly. The enlargement upon the left side of the forehead broke down and the large abscess was opened a few days after the operation. The pus from this, or the discharge from the nose, set up a violent ophthalmia, from which the patient suffered for a week or ten days. Two weeks from the day of the first operation the carotid upon the left side was removed and very soon the symptoms improved in every respect, the patient was relieved of suffering, and the growth not only checked but it apparently began to recede with the prospects of a material improvement in his condition. The second case was one of inoperable sarcoma of the upper jaw of three months' duration and of very rapid growth. In this case the interval between the operations was longer than in the first, on account of the occurrence of a severe secondary hemorrhage on the seventh day, which was due to tying the vessel too close to the bifurcation. The first operation in this case relieved the patient of all symptoms caused by the rapidly increasing pressure, and the growth apparently subsided materially. The second operation had not been performed long enough to give much idea as to how much permanent decrease there would be in the tumor.

In commenting upon the operation, it was claimed that in these cases the patient was simply doomed if nothing could be done, and this appeared to be the only recourse that offered any hope of benefit. He had performed various operations upon the external carotid artery in the cases of malignant diseases, having tied the vessel twenty-six times, four of these being cases of double ligation. The operation had been not accompanied by any mortality. Little could be accomplished by simply ligation of even both carotids because the circulation was re-established so rapidly that the nutrition could not be cut off with any degree of permanence. The operation of excision as recommended by Dowbarn seemed to be the only procedure that offered any hope and while this would not perhaps produce much permanent effect, yet it seemed undoubtedly true that the lives of patients could be much prolonged and their sufferings greatly lessened. The operation was one of considerable magnitude and dealt with structures of great importance an-

atomically, yet the result demonstrated that there was comparatively little danger in the performance of it.

Empyema Following Lobar Pneumonia.

According to the New York Medical Journal for November 24, W. Hale White reports 45 cases of empyema following lobar pneumonia.

He says that in 1,331 cases of pneumonia occurring in Guy's Hospital from 1883 to 1898, empyema developed in 45 cases, or 3.3 per cent. Pneumonia has increased of late years and has become a more severe disease; this is possibly due to the increased prevalence of influenza. The temperature is the most important aid in the diagnosis of empyema following pneumonia. There is a fall of temperature at the pneumonic crisis with a subsequent rise in about one-third of all cases. In many cases there is no apyrexial interval and pus may be present from quite early in the illness. In other cases pericarditis and malignant endocarditis may prevent the fall of the temperature to normal after the crisis of the pneumonia. The duration of the apyrexial interval is usually from one to five days. Five of the 45 cases had pericarditis, but only one pyopericardium. Malignant endocarditis was present in 3 cases. The presence of local tenderness is of great importance. A tender spot often exists over deep-seated small abscesses, and should be chosen for insertion of the exploring needle. Pus gives the well-known signs of fluid, but the detection of small empyemata is often most difficult. (Edema of the chest wall is said never to occur in pneumococcal empyemata; the pus from them is often light green and very thick. In no case did a single aspiration stop the pyrexia and formation of pus, even in the cases where the pneumococcus was the sole organism found. Of the 45 cases, 13 died, a mortality of 29 per cent. The extra danger to life in pneumonia, complicated by empyema, is not very great. The amount of pus varies greatly; 170 ounces were present in one case. It may collect with the greatest rapidity.

Eclampsia.

Eclampsia is an auto-intoxication, says Henry J. Kreutzmann, in the Occidental Medical Times for November. He says that it is not so much the presence or absence of albumin in the urine as it is the amount of urine voided. A woman will not be seized with eclampsia if her urine is flowing freely.

Of course the presence of albumin and

casts with edema indicate the damaged condition of the kidneys and such kidneys may cease to act at the critical time much easier than healthy ones, but the absence of albumin does not mean always that there will be no eclampsia. It is necessary, then, to see that the urine is secreted freely during pregnancy, and especially during the end of the term a careful watch should be kept and every change noted. Where it is impossible to secure a free flow of urine the bowels and skin should be stimulated. The prevention of eclampsia is to remember the toxic origin, watch the urine closely, secure free elimination.

Facial Diplegia.

Luther C. Peter, in *Pediatrics* for November 15th, reports a case of facial diplegia following middle ear disease.

The patient was a girl of 14. During a severe attack of scarlet fever she had a pain in both ears accompanied by free discharge and a few days later had difficulty in drinking, fluids running from the corners of her mouth. Several months later she came in the hospital. At that time her condition was as follows:

At rest the right side of her face droops decidedly, and during emotion remains impassive. The mouth is drawn to the left and the naso-labial fold is obliterated on the right. She cannot whistle, and any effort to contract the muscles of the lower part of the face results in a marked drawing to the left, producing the appearance of a one-sided facial palsy.

In the upper half of the face the double palsy is more apparent. The forehead is smooth on both sides and no amount of voluntary effort can produce contraction of either brow. The palpebral fissures, too, are wider than is normal, which produces slight bulging of the eyes. On the right side this is more apparent because the lower lid tends to fall away from the eyeball. When the child endeavors to close the eyes the left lids approximate but imperfectly, while on the right side the lids remain fixed and the eye is rolled up until the pupil hides beneath the upper lid. There is little expression even during emotion; in fact, except for drawing of the mouth, the muscles remain fixed during laughter. She does not, however, have the mask-like expression seen in a case of typical palsy as it occurs in advanced years. This is easily explained by the partial recovery on one side and also by her youth. The subcutaneous fat of childhood hides deformity by preserving the normal contour of the face.

She cannot hear from either ear, but tests

seem to indicate that it is deafness of conduction rather than of disease of the auditory nerves. The malleus and incus on the right side and the malleus on the left have been washed out, and there is denuded bone in both ears.

There is no deviation of the tongue to either side when it is protruded, and in other respects this organ is normal except as to taste which is impaired on the tip. Quinine and syrup taste the same on the tip of her tongue. The uvula is deflected to the left and the arch of the soft palate is higher on the left than on the right, but both sides respond well during phonation. A deflection of the uvula is not infrequent in normal individuals, and does not in this case indicate a lesion of the nerve supply to it. A coincidence in the case also is a diminished sensitiveness to palatal and pharyngeal reflexes.

To the electrical currents the response is as follows: On the left or stronger side a galvanic current of moderate strength produces normal contractions. To faradism the muscles respond, but only to a current stronger than required in health. On the right side the quantitative changes are also present—the anodal closing contractions being greater than the cathodal closing contractions, etc.

A treatment primarily should be directed to the cause. In the case reported and in a great number of cases the aural disease must receive attention. When seen early, counter irritation by a blister back of the ear is indicated, and if pain is a prominent symptom small doses of salicylate of soda will prove beneficial. Iodide of potassium has been of service, and after the acute inflammation has subsided electricity will aid greatly to restore the muscles to their normal condition.

Fracture of the Spine.

Walter Lathrop, in the *Pennsylvania Medical Journal* for October in discussing the subject of fracture of the spine says that in partial lesions we should operate.

Where the lumbar region is involved, with lesions of the cauda equina, operation offers the best chance for recovery.

In fracture of the spinous process, lamina, or entire neural arch, operation is demanded.

Should immediate operation not be done, and we wait six or eight weeks, with the result that paralysis of the bladder and bowels continues with cystitis and severe bed sores present, we may be sure that nature cannot relieve the case, and an operation is not only indicated, but demanded.

Eclampsia.

J. B. Killebrew, in the Medical News for November 3d, gives a plan of treatment for puerperal eclampsia.

He says the following means should be used in the order given: First, control convulsions with chloroform; second, bleed the patient and give intravenous injections of normal salt solution; third, empty the uterus.

He says that this is a rational, common sense method of procedure and offers a hope of better results in the future, especially when improvements in technic have been thoroughly worked out.

Gynecologic Hot Douche.

Frank C. Ferguson in the Medical and Surgical Monitor for October says that the successful use of the hot douche in pelvic inflammation involves several factors.

The degree of heat is very important.

The first action of hot water upon living tissue is to dilate the blood vessels. This is followed by a slowing of the blood-current and increased accumulation of blood in the parts subject to its action. If the heat be continued for a short time, contraction of the blood vessels follows, the rapidity of the current is increased and the parts become anemic. It is upon this secondary action of heat upon blood-vessels that the virtue of the hot douche depends. But to secure this action the water must have a temperature of from 115 to 125 degrees.

The length of time the douche should be continued at each sitting is also of prime importance. It can readily be seen that if the douche be discontinued before the secondary effect of the heat is secured, the parts are left in a worse state than they were before the douche was given. As a rule it matters not how long the douche is continued at each sitting, the longer, in fact, the better, but if it be discontinued under fifteen or twenty minutes, but little benefit will be secured. In most cases of pelvic inflammation a continual hot vaginal irrigation for one or two hours at each sitting will be found to give the best results.

The posture of the patient while taking the hot vaginal douche is of very great importance. The usual way of sitting or squatting over a vessel is the very worst position she can assume. In such position the vagina is thrown into folds and its walls approximate closely together, so that it is impossible for the water to come into contact with any great area of the vaginal surface. The same objection applies to the dorsal position only in a lesser degree. The best position is that known as the Sims'

position, in which the vagina balloons out and its folds are obliterated. In this position the hot water is thrown directly against the roof of the vagina where it is most needed, and it irrigates every portion of the vaginal surface. This position is sometimes more inconvenient, and requires more preparation than the others spoken of, but the greatly increased efficiency secured in the Sims' position amply repays for all the extra trouble required.

The height of the fountain above the escape pipe is an important point to consider, both with reference to the quantity of water used and the comfort of the patient. It goes without saying that the greater the vertical distance between the fountain and the point of discharge, the greater will be the force of the current, and the greater will be the discharge of water in any given time. Now the forcible impact of a stream of water having a fall of four or five feet is so great that it will oftentimes be very painful and at all times uncomfortable to the patient. Besides the quantity of water used, to use a slang phrase, "cuts no ice." It is the measure of continual heat that is desirable and not the quantity of hot water, therefore, the fountain should not be swung more than five or six inches above the pelvis of the patient. This gives a slow, steady flow of the current without much force, but carries as much heat to the parts as twice or three times the amount of water would carry when flowing with correspondingly greater force and quantity.

Gonorrheal Rheumatism.

George Lorimer, in the Quarterly Medical Journal for November, gives an analysis of his experience with 250 cases of gonorrheal rheumatism treated in the past 30 years.

His conclusions are:

That the different descriptions of gonorrheal arthritis, depend on the fact that a uniform type of ordinary rheumatism, has not been taken as a standard of comparison and contrast, and therefore many of the alleged differences are not essential distinctions, but are simply dependent on the degree of pyrexia.

That, excluding cases of ordinary acute rheumatism occurring during gonorrhea, there are three distinct forms of gonorrheal arthritis: (a) The rheumatic form, in which there is a previous history of rheumatism, and in which the initial pyrexia is acute, the type of arthritis migratory, the perspiration of acid odor, the disease being at first essentially identical with acute rheumatism.

As it proceeds the pyrexia becomes sub-acute, the migratory arthritis ceases, and becomes fixed in one or two joints, where it runs a tedious and protracted course. It is in this form that cardiac complications may appear, and that the analogies with ordinary rheumatism are more apparent. Whether there are two concurrent diseases or a hybrid disease, *i. e.*, ordinary acute rheumatism modified by a toxic influence, is matter of conjecture; (b) the subacute type, or true gonorrheal arthritis, which constitutes the largest proportion of cases, in which cardiac complications are seldom present, and when they occur, probably result from infective endocarditis, in which there is absence of acid perspiration a stationary type of arthritis, a liability to chronic articular changes, sometimes sup-puration and marked muscular atrophy; (c) the chronic asthenic type, frequently mono-articular in scrofulous subjects, with hyarthrosis and frequently effusion of sero-purulent fluid.

That scarlatinal rheumatism and gonorrheal rheumatism have certain distinctions in common, such as rarity of cardiac complications and liability to suppuration. On the other hand, the fugitive character of the former, contrasts with the persistent character of the latter.

That in regard to chronic articular changes, gonorrheal arthritis occupies an intermediate place between ordinary rheumatism and arthritis deformans; for on the one hand though the joints do not quickly return to their natural condition, they hardly ever proceed to further destructive changes.

Gastric Cancer.

In the Hot Springs Medical Journal for October J. E. Allaben has a paper on this subject in which he reports a successful case of pylorotomy. She recovered from the operation and was well for two months when she suddenly developed peritonitis and died within a week.

He says that cancer is one of the most potent factors in the causation of death with a tendency to constantly increase in frequency of occurrence.

Gastric cancer occurs in about one-fifth of all primary cases.

In gastric cancer the pyloric region is affected in 60 per cent of the cases,

The treatment of gastric cancer directed to a permanent cure is in the present state of our knowledge limited wholly to surgical methods.

As early total extirpation of malignant growths with the hope of permanent cure

is the goal toward which we are constantly striving, and as these growths in gastric cancer occur at the pyloric region in 60 per cent. of the cases, it would seem to follow as a natural conclusion that pylorotomy would be the treatment most frequently prescribed for the cure of this malady.

Inasmuch as early diagnosis is the greatest requisite for directing proper radical treatment, the internist and the surgeon should turn their best efforts in this direction.

If the operation of pylorotomy were performed before obstructive symptoms manifest themselves and before the occurrence of metastasis, the immediate results would be as favorable as in any other abdominal work and the remote results as good as in extirpation of the breast for carcinoma.

Extra-Peritoneal Method of Dealing with Fibroids.

According to J. P. Remyan, in the Memphis Medical Monthly for November, the intra-peritoneal method of dealing with fibroids is dangerous. He says that there is danger of soiling the peritoneum with the contents of the uterus and cervix which may be septic, and hemorrhage, either primary or secondary, is likely to occur. On the other hand, he claims that the extra-peritoneal method is simpler of execution, there is less danger of sepsis and hemorrhage, it can be done in less time, therefore with less shock, and for the above reasons the mortality is bound to be less.

Gall Bladder Diseases.

Geo. E. Brewer, in the Medical Record for November 17th, discusses the differential diagnosis in diseases of the gall bladder and ducts.

The three chief symptoms occurring in such diseases are, pain, tumor and jaundice.

Pain: The occurrence of repeated attacks of acute paroxysmal pain, in the upper right quadrant of the abdomen, strongly suggests a lesion of the biliary passages. This suggestion is accentuated if the attacks occur at night, or during fasting, and are accompanied by vomiting and fever. If the pain radiates upward to the back and shoulder, and if an area of tenderness exists under the free border of the ribs, the diagnosis is still more probable.

If in addition to the pain we have a palpable or tender tumor under the lower border of the ninth rib, in all probability the case is one of cholecystitis. If, on the other hand, there is jaundice but no gall bladder tumor, we probably have to do with a lesion of the common duct.

Other conditions giving rise to acute pain in the upper abdomen, and to be excluded, are, first, gastric ulcer, in which the pain and tenderness are more generally located in the epigastric or left hypochondriac region, and in which fever, as a rule, is not present; appendicitis, in which vomiting and fever may also be present, but the pain and tenderness are usually located in the right lower quadrant of the abdomen; renal colic, in which the pain originates in the flank and extends downward along the ureter to the testicle, which may be retracted, and which is often accompanied by vesical irritation and hematuria; the gastric crisis of tabes, in which fever is absent, and although the vomiting is present, there is no characteristic point of tenderness. These cases also show an absence of the patella reflex and the presence of sensory disturbance and ataxia in the extremities. Occasionally, pain in this region, strongly simulating biliary colic, will be caused by the presence of inflammatory adhesions in the region of the pylorus and duodenum, causing a narrowing of the canal with dilatation of the stomach. Chronic intestinal obstruction, or the early pain of a local peritonitis from other causes, has given rise to difficulties in diagnosis; and lastly, syphilitic hepatitis may present pain and other symptoms almost identical with those generally found in calculous disease of the biliary passages.

Tumor: A tumor in the right hypochondriac region, which develops slowly and is preceded by a history of cholelithiasis, which is round, oblong, or pear-shaped, with a smooth convex surface, elastic or fluctuating; which lies immediately under the abdominal wall below the ribs and near the outer margin of the right rectus muscle; which moves with respiration; which allows a certain amount of lateral pendulum-like motion on account of its attachment above; which cannot be made to disappear like a movable kidney under the ribs, and which is not accompanied by pain and fever, is in all probability a gall bladder distended with mucus (hydrops). If with such a tumor there is a progressive jaundice, it is probably a gall bladder distended with bile from common-duct obstruction. If such a tumor is sensitive to the touch and is accompanied by fever it is doubtless a gall bladder distended with pus (empyema). If the tumor is ill defined on account of muscular rigidity, if there are acute radiating pain and marked tenderness in the right hypochondriac region, we have generally to do with a cholecystitis with local peritonitis. The presence of a tumor corresponding to the above description, with-

out pain, fever, or jaundice at first, but presenting a hard, irregular surface, is in all probability cancer.

Jaundice: The occurrence of a mild transitory jaundice unaccompanied by other symptoms suggests a catarrhal obstruction of the common duct (a mild duodenitis from indigestion). The occurrence of a temporary jaundice with colic suggests the passage of a stone through the common duct into the intestine. The occurrence of intermittent jaundice, intermittent colic, and intermittent fever suggests a floating stone in the common duct. The occurrence of continued jaundice, with chills, fever, hepatic enlargement and tenderness, hypertrophy of the spleen and general sepsis, suggests an infective cholangitis. The occurrence of a progressively increasing jaundice, and enlargement of the liver, with a previous history of colic, suggests an impacted stone near the papilla. The occurrence of a progressively increasing jaundice, without pain or fever, but with a tumor of the gall bladder, suggests common-duct obstruction from new growth.

Gastric Ulcer.

According to Medicine for November, William Stuart-Law in the *Lancet* of September 8th says that the treatment of gastric ulcer is at best disappointing. Of the theories which have been propounded upon which treatment is based, none have proven wholly satisfactory. He thinks he has found a solution of some of the difficulties in the use of an artificially prepared mucin. It is obtained in large quantities from ox bile and comes in the form of a dark-brown powder, tasteless and odorless and quite unobjectionable. The reason of the treatment is found in the symptoms of the patient, namely, a hyperacid secretion in which there is practically no mucus, a dry, coated tongue, dry stools, and constant constipation. These, he thinks, point to a deficiency of the normal secretion of the alimentary tube. Just before meals a cachet is given containing ten grains of bicarbonate of soda and ten grains of the dry powdered mucin. This is followed by immediate alleviation of all painful sensations in the gastric region. The mucin is found to be a practical laxative favoring regular action of the bowels. The mucin is a compound substance, composed of a carbohydrate and an "animal gum." All mucins are viscid and tenacious, and are precipitated by acetic acid and dissolved by alkalies. Ten grains each of mucin and bicarbonate of soda, mixed in a glass with a little water and gradually heated to the temperature of

the body, readily changes into a sticky glue, and this change, taking place in the stomach, effectually protects the ulcer.

Hydrotherapy in Tuberculosis.

J. H. Kellogg concludes an article in the Medical News for November 24th, on the Hydratic Treatment of Tuberculosis.

He says that the essential features of rational Hydrotherapy as applied to pulmonary tuberculosis may be summarized as follows:

Both general and local cold applications to the skin.

Careful graduation of the application both as regards its intensity, duration and frequency, by modifying the temperature and mode of procedure, keeping always within the limits of the patient's ability to react. The best methods for accomplishing this are dry friction, wet hand-rubbing, wet mitten-friction, cold towel-rubbing, wet sheet-rubbing, half-baths, the general douche.

The application of compresses, hot and cold, as a means of relieving pain and controlling the local blood-supply, especially the use of the chest-pack to relieve cough and to aid the tissues in combating the disease and the employment of the hot sponge bath and various other hydratic means for relieving special symptoms.

Hernia of the Chorion.

L. H. Laidley, in the American Journal of Obstetrics for November, reports a case of hernia or diverticulum of the chorion.

The patient gave the following history:

Mrs. I., age 22, was confined at the seventh month (being her second pregnancy) on August 5. She was in labor about six hours; all that time the os was fully dilated without any pain until a few minutes before her delivery, which was normal; twenty minutes afterward a tumor-like body, seven inches in diameter, was expelled, proving to be a sac containing amniotic fluid with coagulated blood. It was attached to the placental covering one inch to the left of the funis, making a pedicle one-half inch in diameter, made up of the chorion, blood vessels, and connective tissue. The placenta was detached forcibly in order to preserve the sac and contents. A microscopic examination of the cyst wall shows it to contain the same anatomical structures as the chorion, fed by the same blood vessels, producing a diverticulum or hernia of the chorion, the fetal side presenting the chorion, the inside the amnion.

The literature does not present a similar

instance of this form of tumor. As to the cause of its development, he gives the following theory: Early in the pregnancy there was, because of a relaxed state of the wall of the chorion, a portion of it so twisted as to form a new chamber, receiving its blood from the usual source, its cavity—the normal amniotic fluid, and because of its partial interference of the blood vessels an effusion into the sac.

Hypnotic Sleep and Anesthesia.

In the International Journal of Surgery for November, Robt. T. Morris makes the following reply to a question in regard to this subject:

I employ for hypnotism the very simple method of tiring the eyes by having the patient concentrate his attention upon the head of a large bright pin stuck into an ordinary white visiting card and held a few inches away from the eyes. The patient should be in a recumbent position. I tell the patient that when the eyes begin to tire he will feel drowsy. As soon as the eyes are evidently beginning to tire I say to the patient that he is becoming drowsy, and repeat the suggestion until he is ready to close his eyes. I then say that he will sleep a little, and repeat the suggestion until his breathing indicates sleep. If we then tell him that he cannot open his eyes if he tries, and if he tries and fails, he is ready for any further suggestions, like telling him that his headache will disappear, that he cannot drink whisky for a week without vomiting, that he is smoking a cigar, or any other suggestion that one chooses to make. It is essential to tell him that he will awaken in five minutes or in the morning, or at some fixed time.

Hypnotism should be employed with more caution than we observe in giving chloroform or ether. It seems to lessen the patient's general resistance to external impressions for a long time—perhaps permanently—and if such is the case the hypnotist will turn out many disabled wills if he is not well on guard and judicious in his selection of cases. It is not a matter to be played with at all. When I first took up the subject as one of the many interesting branches of collateral knowledge that the surgeon should possess, it seemed so easy to hypnotize children and a large proportion of adults that I was tempted to employ the process frequently for minor operative work, and for treating headaches, and insomnia and various nervous symptoms. My next sensation was that friends of the patient sometimes classed me among the spooks, and nothing is more repulsive to the matter-of-fact sur-

geon who prefers to be looked upon as a very responsible sort of citizen. My next observation was that patients who had once been hypnotised had an uncanny tendency to become subject to the slightest suggestion of anyone who had hypnotised them, and I do not care to stand in any such relation to other people. I prefer a scrimmage and a fight for logical deductions in all of my dealing with others, and am very uncomfortable in the presence of weak will, fearing that my influence may not be best for the individual. As a consequence of this experience I employ hypnotism very seldom nowadays, and only in cases where we are justified in taking very serious steps for overcoming some serious difficulty. It is a dangerous resource.

Hyaline Degeneration of a Fibromyoma.

According to the Medical Record for November 10th, Garrigues presented a specimen before the N. Y. Academy of Medicine showing hyaline degeneration of a fibroma of the uterus.

The specimen had been removed from a woman forty-five years of age, who had lost flesh and had suffered from backache for some years. On palpation he had felt a non-sensitive tumor of considerable size in Douglas' pouch, and in front of this he thought he had felt a small uterus. He had, therefore, diagnosed an ovarian cyst. On performing abdominal section he had found that what he had taken to be the uterus was the hypertrophied cervix. The interior of the mass was filled with gelatinous and degenerating myomatous tissue. These cases had formerly been described as fibrocysts of the uterus.

Heart Disease or Epilepsy.

In the Annals of Gynecology and Pediatrics for November, F. Savory Pearce discusses the relation of heart disease and epilepsy.

He thinks that there is a great similarity between petit mal where the heart is affected and syncopal attacks independent of the epilepsy. After reporting several cases he gives some conclusions as to the significance of syncope in these cases. There is, in a minority of cases of "heart failure," so-called, difficulty of discerning the true origin of the cardiac symptoms. Organic heart disease would be a sign, in a difficult case with a comatose mental state during the spell, that the syncope was entirely of cardiac origin. Rarely is organic disease of the heart the cause of convulsions, except those due to emboli, in which case

paralysis or death generally follows the spasms. The less frequent and variable the apparent unconsciousness during an attack of syncope, the more likely the hysteroid nature. The condition in children is most difficult of diagnosis. The presence of a slow, full and irregular pulse, with or even without unconsciousness, makes more likely the epileptoid nature of the case. Leaky skin and cold extremities are more in favor of hystero-anemic cases. The absence of pain in any case eliminates angina. Cyanosis is not common, except in the organic heart cases. A tendency to rigidity without convulsion is in favor of hysteria being the background of the clinical picture.

Hemoptysis.

According to the St. Louis Medical Review for November 3d, W. G. Smith recommends the following treatment in hemoptysis:

Reassure the patient and calm his natural alarm and excitement, and that of his friends, by a few judicious words and simple directions, and emphasize the fact that hemorrhage *per se* is rarely a matter of urgency. It is curious to observe that gastric hemorrhages, which are often of much more serious import, have not the same depressing effect upon the patient as a slight tinge of blood in the expectoration. Avoid irritation of the gastric ends of the vagus nerve. Therefore do not administer cold drinks or pieces of ice to patients suffering from phthisis complicated with hemoptysis. Cold drinks irritate the gastric branches of the vagus, give rise to cough, and thus aggravate the bleeding. Moreover, by causing contraction of the blood vessels of the stomach, they may tend to increase the flow of blood to the lungs, and intelligent patients, the subjects of hemoptysis, usually discover the truth of this by experience, and avoid cold drinks (Eklund). Allow, on the contrary, warm mucilaginous drinks. An icebag to the outside of the chest is perhaps of use. Keep the patient absolutely quiet in mind and body. Give morphin hypodermically; this is the best thing of all to do. Relieve the bowels freely by magnesium sulphate or by calomel. Let the diet be simple and nutritious, reduce the amount of fluid, and give no alcohol.

Inebriety.

In the Quarterly Journal of Inebriety for October, Geo. E. Partridge gives a study of cases of inebriety. He says that people who use alcoholic drinks to excess may be divided into two classes, dipsomaniacs and drunkards. The former are periodic

drinkers, the latter drink steadily wherever they have the opportunity. Two general types of organization predispose to drunkenness, one the undeveloped type with a low order of intellect, morals and physique. The other the degenerated type with culture and high ideals but lacking in balance. He gives extracts from the history of 65 cases of inebriety in which the usual motives leading to intoxication are enumerated. Desire for excitement, experience and abandon, to increase companionship to put off reserve in the presence of the others, to kill pain, to calm moral distress, to overcome self-consciousness, to steady the nerves for work or unusual strain.

Intra-Ligamentous Cysts.

C. Jeff Miller, in the New Orleans Medical and Surgical Journal for November, reports a case of double intra-ligamentous cyst in which the entire uterus was removed and the case drained through the vagina, the patient making a good recovery.

He thinks these double growths, if large with many adhesions, are best dealt with by doing a hysterectomy as a routine measure. He concludes that in many cases where intraligamentary growths are suspected it will be best to first secure the uterine artery, or arteries, through the vaginal vault before opening the abdomen.

If cysts of considerable size are found occupying both broad ligaments and intimately connected with surrounding structures, hysterectomy as a routine measure will yield the most satisfactory results.

If sepsis is present—e. g., badly adherent pus tubes, or an infected cyst sac, drainage is of utmost importance and is best obtained per vaginam by removing the uterus unless very good reasons exist for retaining that organ.

Drainage is oftener indicated than in other pelvic conditions, owing to the extensive raw surfaces produced during the enucleation of the growth and the notable tendency of these growths to become infected.

Impetigo Contagiosa Bullosa.

According to Martin F. Engman, in the St. Louis Medical Review for November 10th, the diagnosis of this condition depends upon the following points:

History of contagion or epidemic; other pustular conditions upon the patient, attendants or those in close contact with the patient.

Location of eruption upon exposed parts and those parts accessible to autoinoculation and scratching.

The acute progress of the disease.

Usually mild constitutional symptoms.

"Eccentric and peripheral extension of its primary lesion." (Elliot.)

Autoinoculability of lesions.

Other symptoms of impetigo may be found, as the "stuck on" crust, vesicles, circinate lesions.

Furunculosis, especially on the head, often associated.

Prompt reply to mild local antiseptic applications.

Smears from the bullæ show diplococci, cocci in short chains, and zooglea, neutrophil leucocytes, large lymphocytes (in infants especially), rarely red cells and only a few eosinophile cells.

The blood shows nothing unusual or interesting, except the absence of eosinophilia.

The treatment is fortunately simple and effective; mild, antiseptic and soothing applications are indicated. Anything the least irritating should be avoided, and for this reason the applications should be carefully watched. Strong antiseptic preparations only increase the inflammation and surface for inoculation. The bullæ should be freely opened, and the contents caught in absorbent cotton, not allowed to run over the vulnerable skin. The surface should then be freed of the diseased, infected covering or epidermis, by clipping it off close to the edge of the bullæ, or it will readily break at this point by slight traction. The surface thus exposed should be dusted with an antiseptic dusting powder (see below), and the powder gotten well under the undermined epidermis at the periphery. When the disease is distributed over a large area and there is much crusting, a bland oil, such as carron oil, liquid albolene, or sweet oil, to which is added 2 per cent. of salicylic acid, should be used. This is rubbed well over the surface, the bullæ opened, the crusts gently detached, then the following powder plentifully dusted on;

R.	Ac. salicylic,	gr. xx.-3ss.
	Ac. boric,	3ij.
	Zinci ox,	3ij.
	Amyli,	3ij.
M.		

Baths are contraindicated. Ointments also seem irritating. A drying, mildly antiseptic, soothing dusting powder, with a bland oil to soften the crusts and prevent the clumping of the powder when mixed with the serous oozing and contents of the bullæ, has been the most successful method of treatment.

Importance and Significance of the Reflexes.

The clinical value of the reflexes is a matter of no small importance to the general practitioner, says Irwin H. Neff in the *Physician and Surgeon* for October.

He concludes that the examination of the more important reflexes is a matter of practical value to the physician. In order to appreciate the diagnostic and prognostic value of the reflexes, a knowledge of their behavior in health is essential. A certain technique is always indicated, otherwise wrong inferences may result. When examining reflexes for diseases never attach undue importance to an alteration in a single reflex. Certain definite changes in reflexes are suggestive, and at times pathognomonic. Such modifications should be considered with the syndrome of the suspected disease.

Infant Feeding.

John J. Hanley, in the *Medical Council* for November, makes a plea for the baby. The article is addressed to mothers who can and will not nurse, and to physicians who can restore an ancient and commendable practice by preaching it.

He says that mothers should suckle their young:

Because it is a natural obligation.

Because it is a moral (religious) one.

Because it is a pleasure.

Because it is the most beautiful living picture in the world.

Because it charms a man to see it.

Because it is a sermon in tableau.

Because of its refining and softening influence on the higher emotions.

Because the child wants to.

Because it has a right to.

Because it is "open day and night."

Because it is "always ready."

Because it doesn't need to be sweetened or heated.

Because it is the only ideal infant food.

Because it is not a perfect substitute, but the "real thing."

Because there is no perfect substitute.

Because the baby likes it (not important).

Because it does baby good.

Because it doesn't make him "tired."

Because it doesn't have to be sterilized.

Because you don't have to cudgel your brains about the proportions of milk-sugar and lime water and other confusing things.

Because you serve the State better.

Because it is cheaper (you get it for nothing).

Because you don't have to read chemical analysis of various celebrities on the con-

tainers, declaring the extraordinary skill and knowledge in producing such wonderful rubbish, as some milks are.

Because you don't have to get out of bed nights to get "the other" ready.

Because you can "modify" it by your diet and hygiene.

Because nature is a better chemist than you are.

Because you don't have "to run" a chemical laboratory in the house.

Because you will feel better yourself.

Because the mutual love will be greater.

Because your husband would prefer it (or ought to).

Because all true mothers do it.

Because you will show good example to other women.

Because the baby will be physically stronger to fight for its existence both in health and in sickness.

Because it is the same as mother and grandma "used to make," a strong recommendation daily observed.

Intra-Abdominal Omental Torsion.

According to the *Medical Record* for November 24th, Joseph Wiesner presented to the N. Y. Academy of Medicine, a man 79 years of age, upon whom he had successfully operated for the removal of an intra-abdominal omental tumor.

Owing to the patient's bad condition at the time of operation, nitrous oxide gas had been used for the anesthetic. The history had pointed to an appendicitis, but the latter had been excluded at the operation. At the site of the tumor that had been detected on palpation was a piece of omentum which had been subjected to torsion. It was of a dark blue color. The adhesions were tied off, the pedicle was untwisted, and the abdominal wound was closed. The patient had made a good recovery.

Jaundice.

In the *Medical News* for November 17th, Archibald Maclaren writes of the Surgical Importance of Jaundice. He says that during the past year he has performed 13 operations upon the gall-stones, yet in not one of the cases had jaundice been at any period of the trouble.

He concludes that slight attacks of jaundice are of comparatively little surgical importance, and that the majority of surgical disease of the biliary passages have no jaundice at all. That persistent jaundice, especially if progressive, is usually a contraindication. While on the other hand intermittent, deep jaundice, especially if associated

with chills and a rise in temperature, denotes a stone in the common duct which urgently demands removal.

Lead Poisoning by Beer.

E. R. Morgan, in the *British Medical Journal* for November 10th, as reported by the *New York Medical Journal* for November 24th, tells of a carpenter, aged 43, who contracted lead poisoning by drinking beer which held small quantities of lead in solution. On examination, he showed all the signs of marked lead intoxication, such as gastric catarrh, constipation, muscular weakness and tremor, and the blue lines on the gums. He improved but slightly under treatment, and died some months after leaving the hospital. It was learned that the man was in the habit of drinking a glass of beer very early in the morning; this he always obtained from the same public house, where the beer was drawn through old lead pipes, so that the first glass of beer drawn in the morning had been in contact with the lead all night. Chemical examination of such a first glass showed the presence of lead.

Laceration of the Perineum.

Herman J. Boldt, in the *New York Medical Journal* for November 3d, reports an operation for laceration of the perineum in which Corning's anesthesia failed to produce insensibility to pain. Two injections were used by Goldan, who is an expert in this form of anesthesia, but there was still sensibility to pain and resort was had to general anesthesia. The tear was complete going nearly two inches into the rectum. The borders of the rectal tear was dissected from the surrounding tissues and a continuous suture of fine catgut was used beginning from above and so passed that the mucosa was not injured. One suture of silk-worm gut was used for the sphincter which, he says, is sufficient.

The vaginal tear was treated in the same manner. Only three sutures are used to unite the perineum, more than these are likely to cause strangulation of the tissues between them. He has not had a single failure when this method was used.

Meningitis Complicating Pneumonia.

T. C. Ely, in the *Pennsylvania Medical Journal* for October, reports a case of meningitis complicating pneumonia.

The points of interest were:

The recovery from pneumonia complicated by meningitis, a rare issue.

The striking clinical resemblance to cere-

bro-spinal fever in its late phenomena, which calls forth the query whether lumbar puncture is absolutely essential to differentiate such cases or whether the clinical history is not sufficient?

The mixed form of pneumonia, of croupous type, becoming lobular; a pneumonia which might have terminated by crisis as a croupous form had not pyogenic organisms co-operated in a soil likely tuberculous.

The family history, personal history and some aspects of the clinical course point to tuberculous meningitis, which contrary to the general belief, ended in recovery. This leads to the question, may not some local cases of tuberculous meningitis terminate favorably, just as local tuberculosis in other parts of the body may heal?

In any case on account of the uncertainty of diagnosis of tuberculous meningitis, the scientific inaccuracy of calling a case tuberculous meningitis because it terminates fatally, or some other form of meningitis, because there is recovery, is open to criticism.

No case of meningitis should be despaired of simply because there is a suspicion of tuberculous infection.

Laparotomy in a Woman 68 Years of Age.

Wm. H. Wathen, in the *American Practitioner and News* for October 15th, reports a case of laparotomy for a large universally adherent parovarian cyst. When the abdomen was opened the tumor was found adherent to the anterior abdominal wall over three-fourths of its surface, but not adherent to the intestines or bladder. With some difficulty the adhesions were separated and the wound closed without drainage. On the second day she had some congestion of the lung, but under stimulation and calomel she got better and on the fourth day was out of danger.

He thinks a previous tapping was the cause of the adhesions and advises against such treatment.

Mastoid Abscess.

M. F. Coomes, in the *American Practitioner and News* for November 1st, reports four cases of mastoid abscess. All made good recoveries after operation with free drainage.

He concludes that the operation is not difficult or dangerous in the hands of a careful surgeon. When a good-sized opening has been made into the mastoid and there is a free drainage established, it is well to stop the operation at this point unless there is some good reason for proceeding further. Of course, if it is evident that there is still

some diseased bone, it should be removed; but this matter should be fully established before going further.

Swelling of the external tissues is not at all essential to the presence of pus in cases of mastoiditis, as cases often occur where there is not the slightest swelling of the tissue overlying the bone. Cases may occur where there is never a rise in the bodily temperature. Such was the condition in one case of this report. Persistent, excessive suppuration from the drum cavity should always be considered as evidence of the mastoid being involved. All cases of mastoiditis should be operated on early in the disease, as delay is the great danger.

Nasal and Naso-Pharyngeal Affections Treated by Hot Air.

According to the Journal of Laryngology for November, M. Lermoyez and G. Malm, in a paper before the International Medical Congress, described a new method of treating nasal and naso-pharyngeal affections by the application of hot air.

Hot air had been used in the treatment of diseases of the upper respiratory passages only in the form of inhalations in which the air was moist and scarcely raised in temperature above that of the surrounding atmosphere. The authors applied currents of super-heated dry air (80 deg. to 100 deg. C.) to limited areas of the mucous membrane, a method similar to that employed by Hollander and Jayle in dermatology and gynaecology.

The air was obtained from steel cylinders, in which it was stored under a pressure of 120 atmospheres, was heated in a metal serpentine tube, and led to its destination in a protected flexible metal tube. To the latter were adjusted various canulæ of different sizes and shapes, suitable for applying the air to the inferior turbinates, to the orifices of the Eustachian tubes, or to the ears. At the base of each canula was an arrangement for regulating temperature and pressure.

The air was applied under guidance of the eye, with speculum and frontal mirror. A sitting lasted two minutes, and was repeated two or three times a week. As a rule from eight to twelve sittings were necessary to obtain good results. The treatment was absolutely painless. On applying the hot current there was at first intense retraction of the mucous membrane, quickly followed by a free aqueous secretion (defensive) which ceased after a few seconds. The good effect was manifest at once. At first only temporary, it tended to become permanent.

This treatment had been most beneficial in chronic congestive coryza with intermittent nasal obstruction. The results were remarkable and lasting if there was no angiomatous degeneration of the pituitary membrane. Sneezing and other nervous symptoms of spasmodic coryza soon ceased. The discharge of nasal hydrops dried up, and the mucous membrane returned to a normal (objective) condition. The only effect on hay fever was that the intensity of the crisis was diminished.

Lastly, good effects were obtained in ear troubles (deafness, tinnitus) accompanying nasal and naso-pharyngeal catarrh. Otalgia yielded to the treatment almost immediately.

This treatment was not a panacea for all nasal affections. The authors had found it useless in ozena, purulent catarrh, nasal lupus, true hypertrophic rhinitis, and all affections of nose and naso-pharynx requiring surgical treatment.

Nephritis.

In the Boston Medical and Surgical Journal for November 22d, Chas. J. Enebuske has an article on chronic diffuse interstitial nephritis.

He says that the leading indication for treatment in the early stage is to dilate the arteries and reduce the tension when it is too high. Later, when the compensation is failing the indications are: (1) To increase the systolic stroke of the heart; (2) to relieve the venous hyperemia of the abdominal organs and the lungs, when such exists, and (3) to relieve the edema.

Experience gathered from the administration of exercises in Swedish medical gymnasia and in the Nauheim and Oertel Institutions has taught methods to meet these indications in recuperative cases. Contra-indications to these methods are advanced arteriosclerosis, aneurism and grave aortic lesions. The details of the methods are scarcely capable of simple description and satisfactory formulation. In general it may be said that:

Dilatation of the small arteries and reduction of too high arterial tension can be obtained in many instances by kneading and stroking of the muscles of the extremities with slow strokes and gentle but rather deep pressure.

Increase of the strength of the systolic stroke is obtained in many instances by simple movement of the joints of the extremities with gentle resistance, provided that the exertion is limited to that which the recuperative force of the heart can respond to.

Edema is relieved by centripetal strokings with gradually increasing pressure.

The resistive movement must be given while the patient is in a restful horizontal attitude or half reclining.

Passive movement must be attempted with caution in persons who have not good muscular control, because otherwise the effort of the patient to inhibit co-operative or resistive action either fails, or is so great an exertion in itself that the effect of a vigorous, active movement is obtained instead of the passive one which is attempted.

New Test Meal.

A. E. Austin, in the *Boston Medical and Surgical Journal* for November 8th, says that there are objections to the usual test meals, Ewald's, Riegel's or Klemperer's.

Such objections are: The indefiniteness of the amount of the food elements employed, nitrogen, fat and carbohydrate, and that on account of the lack of fine division, the tube introduced is frequently clogged, which necessitates its cleansing and reintroduction.

He recommends instead, a meal consisting of 2 grammes of dried egg albumin compressed into half-gram tablets. These are to be taken with two glasses of water and the contents withdrawn one hour after taking.

Normal Labor.

In the *New York Medical Journal* for October 27th, Austin Flint, Jr., writes of the management of normal labor including the use of the forceps.

He emphasizes the following points:

The importance of making a diagnosis and a complete physical examination about one month before the onset of labor. This not only will give a great deal of information which may be utilized during the labor, but it affords ample time in which premature labor can be induced if there is any abnormality.

Infrequent examinations during labor: If the delivery of women could be regarded as a surgical operation, requiring as full and complete antiseptic details as other surgical procedures, we could confidently expect non-febrile convalescence. The fact that sterilization of the external genitals, the thighs, and the lower portion of the abdomen is sufficient, deserves mention. An ante-partum douche is not only unnecessary, but is actually harmful, as has been shown by Leopold and others. The use of gloves has not been satisfactory.

The use of anesthetics should be more general in private practice. Ether possesses many advantages over chloroform, and should be used, as a rule, when the pains are of moderate intensity. We have not had enough experience with the new method of spinal anesthesia to justify its use in more than an experimental way; and, if added experience should show freedom from complications, we shall have at our command a method that is nearly ideal.

In the hands of the general practitioner, a low forceps operation should be performed with greater frequency. It is easy of execution, is devoid of danger, saves unnecessary suffering on the part of the patient, and often actually enables us to preserve the perineal floor intact. On the other hand, however, median operations, within the cervical canal, and high operations should be done only for some special indication.

Non-febrile convalescence and freedom from local discomfort in cases in which the parturient canal is intact; it is not of the greatest importance in the management of normal cases to acquire skill in so guiding the passage of the head and shoulders over the perineum that the risk of even a slight laceration may be reduced to a minimum. In addition to a mild puerperal fever, lacerations have a tendency to interfere with the involution of the vagina and uterus, and they predispose to many conditions requiring treatment by a gynecologist.

Too many obstetricians are careless in this respect, relying upon the usual good results of an immediate repair.

Ovarian Cysts.

In the course of a resume of some surgical work by M. Goltman in the *Memphis Medical Monthly* for November, he reports an enormous suppurating ovarian cyst which was incised, irrigated and drained.

He says that injuries to the abdomen may give rise to hemorrhage into cyst cavities, and although such hemorrhage is usually announced by symptoms of shock, it is occasionally absent.

With a history of injury in the course of a growing ovarian cyst, the possibility of hemorrhage should not be overlooked; and such hemorrhage, in spite of the absence of shock, may be evidenced by somewhat sudden anemia, amenorrhea, pain, loss of flesh, etc.

With the history of pregnancy in the course of a growing ovarian cyst, dragging of the pedicle is to be expected.

Shock and sapremia in the course of a

growing ovarian cyst during or following gestation, after everything else has been eliminated, are probably the result of twisting or dragging of the pedicle and shutting off of the circulation, and should be treated accordingly.

When a pedicle has been dragged any distance, it becomes so thinned out that great care is necessary to avoid rupturing it during an operation.

The removal of ovarian cysts without adhesion is one of the simplest operations in abdominal surgery, but when they have attained a large size, and where the history indicates that attacks of peritonitis have occurred, their removal becomes difficult or impossible, according to the extent and density of the adhesions formed.

It is sometimes impossible to remove these cysts, on account of the number and character of the adhesions, without seriously endangering or forfeiting the life of the patient. In such cases it is best to resort to incision and drainage, either vaginal or abdominal, with daily irrigation of the cyst cavity.

Tapping ovarian cysts is to be avoided and counseled against. It is the history of most of these cases that tapping leads to infection and suppuration.

Early diagnosis and early operation are to be commended. Early operation in these cases usually means easy operation.

Opium in India.

Robert H. M. Dawborn, in the Therapeutic Gazette for November, gives an account of an interview with Rudyard Kipling on the subject of opium in India.

Kipling spoke of it as the friend, and in certain ways, the mainstay of millions there among the natives. A native takes it increasingly up to a certain point and does not, as a rule, go beyond this for the rest of his life.

He says its use has a tendency to keep off malaria, and all of us who treat malaria know of its good effect in the South when combined with quinine.

Kipling does not think we should be so severe on the opium user in India while we tolerate the noisy, murderous drunkard in our own midst. The poppy heads are cut with a peculiar knife made for the purpose and the work is only done at dusk or early morning. The juice is scraped off 24 hours later at daybreak. This jelly is placed in vessels where it is beaten and at the same time moistened with *saliva*. This must be a very pleasing thought to the opium eater in this country. Opium is good enough alone but with Indian saliva!

Pott's Disease.

Before the New York Academy of Medicine at the meeting of October 19th, H. Gibney read a paper on the diagnosis of Pott's Disease. Five cases were shown as follows:

Case I. *Cervical Pott's Disease*. Girl 8 years. Marked deformity from disease of long duration of several of the cervical vertebrae with scars of abscesses below the site of the disease. Treatment had been discontinued in the summer of 1900. The child had worn a head support combined at first with a plaster of Paris jacket, and afterwards with a Knight's spinal brace.

Pain near the seat of the disease, which is often absent in the other regions, is a common symptom in this region, with a sensitive area at the side of the neck, severe pain with voluntary motion of the head and neck and apparent torticollis yielding easily to traction applied in such a manner as to hold the head in its normal position. Before treatment, relief was sought by a supporting band held under the chin. Abscesses are not an uncommon incident of cervical disease, detected by a examination of the posterior wall of the pharynx or burrowing under the superficial muscles of the neck.

Case II. *Cervical and Dorsal*. Boy 5 years of age, affected for 2 1-2 years with disease extending from the middle cervical to the middle dorsal region. Two abscesses had opened spontaneously at the sides of the neck under the sterno-cleido-mastoid muscle. He had worn a plaster of Paris jacket and jury-mast for 18 months.

A grunting noise with each expiration is almost characteristic of cases of the dorsal region and an early diagnosis is greatly assisted by the occurrence of gastralgia and the appearance of a careful gait and a peculiar apprehensive attitude, expressive of timidity and insecurity, and an instinctive desire to avoid disturbance of the diseased vertebrae. The first sign of a Kyphos is seen in a slight angle breaking the long natural curve of the spinous processes observed in profile as the patient lies prone.

Case III. *Tenth Dorsal. First Stage*. Girl 8 years of age. Under observation since May 5, 1900, and regarded for a time as a case of lateral curvature with a hyper-sensitive, almost neuralgic, condition of the spine. Very recently a suspicious point had been detected at the 10th dorsal and the treatment would now be by a Knight's support.

Case IV. *Dorso-Lumbar*. Girl, 2 1-2 years old, affected with disease of the dorso-lumbar region of 9 months' duration. No abscesses. The spine had the marked rigi-

dity which attended disease in this region and marked gastralgia had been a part of the history of the case. A plaster of Paris jacket had been applied at first, but lately a recession of the deformity had been observed to follow the strict application of a Bradford frame.

Case V. *Eleventh Dorsal—Third Lumbar.* Girl, 13 years old, who had recently come from Russia with a very marked kyphos. But little had been learned of the history and treatment. Sinuses were discharging at points where abscesses had opened spontaneously. The gait and attitude were very characteristic of disease in this region. A Knight's support had been applied and as the child's general condition was fair, the prognosis was good.

Puerperal Sepsis.

F. B. Moore, in the Texas Medical Journal for November, says that the treatment of puerperal sepsis consists, first, if possible, of removing the source of infection, the severity of which we can usually with safety judge by the range of temperature. If the temperature after delivering remains above 100 deg. F. for twenty-four hours without evident cause it is safe to wash out the uterine cavity with hot water with or without some antiseptic added. Of these he prefers carbolic acid, 30 cc. to a quart of water, used in a fountain syringe, with Bozman's uterine douche. Make up two quarts of the solution, and after thoroughly cleansing the external genitals and vagina, attach the douche to pipe and invade the uterine canal clear up to fundus. This is best followed by sufficient dose of sat. sol. sulph. magnes. given in tablespoonful doses every thirty minutes until bowels move freely. The hot water douche, and salts also, should be repeated often until convinced that severe measures are required. Should these fail to hold the temperature down this would be evidence sufficient to justify one in the use of the curette, but the danger to the uterine wall, and the bad results often following this operation when done by the most skilled operators, reminds us that in these cases we cannot be too careful with this useful but very dangerous instrument.

As to the constitutional treatment verum viride, salicyates soda and sulph. quinia. may be used with advantage; also saline purgatives, nutriment and tissue-making foods, alcoholic stimulants, hypodermoclysis of normal salts sol., and the use of anti-streptococcic serum. This last remedy is the coming treatment in all puerperal infections, not that it will eliminate all of the malady in mixed conditions, but it will

eliminate one, the most serious, of the micro-organisms and thereby reduce a complex pathological problem into one more simple.

Post-Operative Treatment of Abdominal Section in Women.

In the Journal of the American Medical Association for November 24th, Walter B. Chase writes on this subject. The closing of the incision may be by the through and through suture of silk-worm gut, silk or silver, or by the layer suture of catgut or Kangaroo tendon. Rigid rules as regards position are unnecessary and even harmful. In case of hemorrhage, saline infusion and securing the vessel. As for drainage every case must be decided on its own merit. He takes issue with the statement that drainage means imperfect surgery. From 12 to 24 hours after the operation teaspoonful quantities of hot mutton or chicken broth may be given every hour or two. If the stomach tolerates this the amount can be increased. In many cases milk is imperfectly digested and should not be given.

Allow the patient to micturate if she can, if not use the catheter four or six hours after the operation. If there is deficiency or suppression use dry cupping over the kidneys, salines by the mouth or high rectal enemas, plenty of water and digitalis. The pulse should be closely watched and in all cases the preoperative pulse should be taken as the standard of comparison. Over stimulation of the inhibitory nerve of the heart should be met with atropin.

Temperature is also important in this connection. Variations may be due to depression, nervous disturbance or sepsis.

If there is pain its cause should be carefully sought for and removed, as when from distension by gas, rather than to give morphia.

For exhaustion, careful feeding, stimulation and nursing are indicated. Tonics like quinine, iron and strychnine have their appropriate field of usefulness.

Pseudo-Hemoptysis Arising in the Naso-Pharynx.

Ricardo Botey read a paper on this subject before the International Medical Congress.

As reported by the Journal of Laryngology for November, the author says that he has seen a score of cases in six years and was surprised that our special literature took so little notice of the subject.

He excluded all cases in which hemorrhage in the cavum was due to ulcer, malignant tumor, or traumatism. According

to the literature, hemorrhages from the upper respiratory tract, which simulated hemoptysis, always arose from the larynx or a varix of the lingual tonsil. The author on the other hand, maintained that in almost all cases the cause of these false hemoptysis was to be sought in the naso-pharynx. The larynx and lingual tonsil were seldom at fault.

Dr. Botey cited six of his cases in support of his position. The patient always coughed but little, but his spit was frequently blood-stained; examination of nose, pharynx, larynx, root of tongue, and chest gave negative results. If one examined the patient during an attack one saw the blood trickle down the posterior pharyngeal wall from behind the soft palate.

A swab introduced into the naso-pharynx would often induce an attack, and in any case would be stained with blood.

The author pointed out that from its position and structure the mucosa of the naso-pharynx was eminently liable to small hemorrhages. A slight superficial erosion was sufficient to produce hemorrhage from the almost unprotected superficial vessels. Such a hemorrhage would be stopped by the formation of a small clot; but this clot, being dried by the respiratory current, was apt to fall off, and so recurrent hemorrhages were produced.

Dr. Botey had frequently seen these small black clots on Luschka's tonsil, but more frequently between that and Rosenmüller's fossae. By touching one with the point of a probe he had produced hemorrhage, and so convinced himself of the naso-pharyngeal origin of pseudo-hemoptysis.

Papilloma of Larynx in Children.

Edw. T. Dickerman in the *Journal of the American Medical Association* for October 27th, says that papillomata is the most frequent neoplasm found in the larynx of children. In his experience the disease occurs once in every 1200 cases.

He concludes that papilloma of the larynx is especially in this country, a rare disease.

In a number of cases they undergo spontaneous cure.

Intralaryngeal methods should always be tried first, unless dyspnea is pronounced, when tracheotomy should be done at once.

After tracheotomy, intralaryngeal methods should be tried.

Patient should wear a tube for six months after the growth has disappeared.

Thyrotomy should be considered only as a last resort.

Pelvic Massage.

E. E. Montgomery, in the *Therapeutic Gazette* for November, describes a method of pelvic massage.

The patient is placed upon a lounge or table with her clothing loosened, the limbs flexed, and the head and shoulders raised so as to relax the abdominal muscles. The operator sits or stands at her feet, introduces one or two fingers of one hand into the vagina, with the elbow of that arm supported by his knee, while the other hand is placed over the abdomen. The fingers of the internal hand are kept fixed firmly against the uterus, while the external hand makes a rotary motion upon the abdomen over the uterus, gradually increasing the force until the latter is outlined. The pressure is made upon its sides and posterior surface, now with the points of all the fingers, now with one, until the entire upper surface of the uterus is manipulated. When the organ is free, it can be readily projected against the abdominal wall, and in this way its entire surface manipulated. Its circulation is markedly influenced and the absorption of exudation expedited. The influence of the procedure is more readily recognized, however, where the uterus is fixed by recent adhesions. In such cases the exudation is rapidly dissolved and the organs set free. In massage directed to adherent ovaries, the rotary motion is over so slight an arc as to appear a mere trembling of the fingers. Frequently pressure is best made with the point of one finger.

The seances should last from five to ten minutes and should be given daily during the menstrual flow as well as in the interval.

Massage has been condemned as being a form of masturbation of a woman by a man, but those who make such an assertion are ignorant of its practice.

What can be accomplished by this method of treatment is a legitimate question. First, it promotes an improved circulation in soft, flabby uteri which are in a condition of subinvolution. The process of involution is completed and the uterus returns to its normal size.

In chronic inflammation with rigidity of the uterine walls inflammatory exudate is absorbed and the condition improved, although no plan of treatment will replace the muscular structure which has been lost by the substitution of fibrous connective tissue.

It enables us to accomplish the absorption of adhesions and the replacement of fixed, retroverted, and retroflexed uteri.

The increased muscular tone secured aids in overcoming relaxation of the pelvic ligaments, and this promotes the maintenance of the uterus in a normal position. The progress of the recovery can be enhanced by the introduction of a tampon of cotton and gauze anointed with an ointment (1.5) of ichthyol in lanolin. The tampon improves the circulation by maintaining the uterus at a higher level. After the manipulation the ichthyol is an agent which promotes absorption. Its employment as a lubricant, sometimes advocated during the massage, is objectionable. Its use prevents the deeper manipulation, and is not used upon the internal hand for the reason that it is keep quiescent.

Prevention of Insanity.

We are what we are from three principal causes, heredity, education and environment, says Brooks F. Berbe in the Cincinnati Lancet-Clinic for November 10th.

Heredity he considers the principal cause of insanity, and for that reason we should have restrictive laws in regard to marriage. Persons with diseased minds as well as with diseased bodies, should not be allowed to marry.

Alcohol is another great cause. Conception while the parent is under the influence of alcohol will result in a weak child, deformed in body or in mind.

The rearing and education of children are important. The family life should be quiet and peaceable, no quarreling or bickerings to impress the growing mind of the child. Education should not be forced, precocity should be repressed, as it is a sign of inferiority. Plenty of out-door life, plenty of sleep, and no stimulants.

He says that neurasthenia or nerve exhaustion is an invariable prodrome of insanity and hence always of immense importance, as, if taken in time, no disease is more susceptible to cure than insanity.

Torticollis.

In the Brooklyn Medical Journal for November, Walter C. Wood, in writing on this subject, groups the cases in certain classes.

The torticollis of infancy, contracted cases in children, muscular torticollis, glandular torticollis, osseous torticollis, cases due to ocular defect, cases due to occupation, and severe spastic cases.

The operative treatment he thinks the most favorable and the more radical the better. In intractable cases division of both nerve and muscle is indicated, the operation being done in several stages.

Puerperal Septicemia.

In the Colorado Medical Journal for October, H. G. Wetherill discusses the prevention of puerperal septicemia.

The means to this end are to refuse to allow the ante-partum or post-partum douche except in the presence of pre-existing infection, to make clean and aseptic the instruments, the hands of the nurse and doctor, and the external genitals of the patient.

When labor comes on the rectum should be emptied by enemas of hot water and soap suds, and the patient given a warm bath all over, the genitals washed in bichloride, 1 to 1,000, and clean clothing put on.

He has each patient to have ready four ounces of chloroform for anesthesia, eight ounces of alcohol 95 per cent., one-half ounce of boracic acid for the cord, eight ounces of lysol, four ounces of antiseptic soap, one new scrub brush, one pound of absorbent cotton, and twenty-five yards of plain sterile gauze. The physician should not carry these things around with him, but they should be gotten new and fresh for each case.

Prescriptions for Children.

In the Medical Record for November 24th, Max Huhner describes a simple method of writing prescriptions for children.

Make each prescription for 24 doses and the entire amount of each drug will be the adult dose multiplied by the age at next birthday.

That is for a child of one year write the adult dose and divide into 24 potions; for two years, twice the adult dose; for three years, three times the adult dose, and so on.

It is only necessary to remember the adult dose if we write all our prescriptions for 24 doses. As an example he gives the following prescription for a child of one year:

R.	Syr. ipecac,	℥x
	Ammon. mur.,	gr. v
	Ex. scillæ fl.,	℥ii
	Aq. q. s. ad.	℥iii
M.	Sig.—3i every three hours.	

Puerperal Infection.

Seale Harris in the Alabama Medical Journal for November discusses the causes and prevention of puerperal infection. He discredits the prophylactic douche and the prevention is summed up in the one word, cleanliness. He brings forward no new theories or methods but strives to have everything clean in the lying-in-room. If you can't be clean be as clean as you can and don't bother about the rest.

Prolapse of the Rectum in Women.

J. Wesley Bovee, in the New York Medical Journal for November 17th, describes an operation for marked prolapse of the rectum in women. The method has a limited field, but in certain cases it may be the only means of relief. He describes the case as follows:

Sister V—, a Sister of Charity in a neighboring city, was thirty-five years of age. She had been treated unsuccessfully a number of years for prolapse of the rectum and uterus, and hæmorrhoids. When she came under my care she was suffering from large internal and external hæmorrhoids and a protruding roll of fully three inches of the rectum, that was thickened and much discolored. The uterus was of about normal size, with its cervix just behind the pubes and the fundus very low posteriorly. A few days later, on March 6, 1900, the operation was done. The hæmorrhoids were first removed, then the abdomen was opened by the usual subumbilical median-line incision. The left ovary was of about three times its natural size and largely consisted of numerous cysts. The appendages were removed and the uterus was firmly fixed to the abdominal wall by four strong interrupted catgut sutures, which passes through a considerable portion of the uterine fundus at the top and the principal fascia of the abdominal wall on either side of the incision. The rectum was now drawn upward until it was fairly tense, and was so held by an assistant until it was sutured to the cul-de-sac and posterior wall of the uterus up to the abdominal wall. This was done by a running catgut suture. It completely divided the retro-uterine pelvic cavity into two equilateral ones.

Popliteal Aneurism.

In the Cleveland Journal of Medicine for November, C. A. Hamann reports a case of popliteal aneurism cured by digital pressure of the femoral artery.

He says that digital compression is the best way of treating a popliteal aneurism. It should always be tried at least before operation is resorted to. There is less danger of gangrene, because the vascular supply is not so suddenly or so completely interrupted. If compression of the superficial femoral artery fails to cure the aneurism, the effort will not have been in vain, for the collateral circulation through the *profunda femoris* will have become at least partly established, and then a subsequent ligation or the more radical extirpation of the sac will be more likely to be successful.

Potassium Iodid in Ophthalmic Practice.

A. R. Baker, in the Journal of the American Medical Association for November 17th, discusses the use and abuse of potassium iodid in ophthalmic practice.

He says that iodid of potash should generally be administered in rapidly increasing doses until from 1 to 500 grains are given daily.

The drug should always be given after eating, and well diluted with water.

Frequent hot baths are essential to the best results in the use of the remedy.

Not infrequently large doses will be tolerated when smaller ones can not be well taken.

The use of the large dose is not limited to syphilitic cases.

Large doses are indicated in: optic neuritis; ocular paralysis; choroiditis; serous iritis and in relapsing iritis; cyclitis and interstitial keratitis.

It is contraindicated in gray atrophy of optic nerve and in most cases of postneuritic atrophy.

Albumin in the urine generally speaking is a contraindication for large doses of iodid.

Young children do not take the iodid kindly and it should be administered cautiously.

The remedy is of doubtful value in early syphilitic iritis.

Large doses are of doubtful utility in the removal of post-operate exudates, but should be given further trial.

Palatable Prescribing for Children.

Herman B. Sheffield, in the Medical Times and Register for November, calls attention to the importance of writing palatable prescriptions for children.

He gives a number of combinations for iron, quinine, and other medicines, and lays down the following general rules:

Never prescribe medicines unless thoroughly convinced of their absolute indication. If a placebo is desirable, employ a palatable adjuvant.

Never prescribe a preparation requiring a large dose when a small quantity of another proves equally efficient, i. e., use an alcoholic extract or an alkaloid instead of a syrup, tincture or infusion.

Never prescribe an offensive, nauseous mixture when a palatable one will be equally serviceable.

Never prescribe more than two ill-tasting drugs in one adjuvant, and do not combine several adjuvants which are apt to disguise each other.

Post-Operative Hemorrhage.

In the Cincinnati Lancet-Clinic for November 17th, A. H. Cordier reports three cases of post-operative hemorrhage.

In one the patient died before it could be stopped, and two recovered after reopening the abdomen.

He says that in diagnosing post-operative hemorrhage the operative history will aid much.

Symptoms of shock and hemorrhage are very similar.

In suspected cases a single stitch in incision cut will tell.

In cases in which a bleeding is anticipated the tube should be used.

The surgery must be quick and decisive in these cases.

Large quantities of normal saline solution will save many cases. This should be used both per rectum and into the veins.

Strychnia, belladonna, etc., will not control bleeding from a uterine or ovarian artery any better than from a radial or temporal.

The surgeon should do what his surgical conscience tells him is right.

Sciatica.

J. W. Bean, in the Medical Sentinel for October, reports a case of persistent sciatica treated by celiotomy and suspension of the uterus. The uterus was badly retroflexed and somewhat adherent. Pressure on the fundus caused intense pain in the right leg. The adhesions were freed and the uterus suspended by Kelly's method. The ovaries and tubes, being free from disease, were not removed. The patient made a good recovery and the sciatica was completely relieved.

Post-Partum Hemorrhage.

John W. Byers, in the American Journal of Obstetrics for October, says that the first measures to be adopted in the treatment of post-partum hemorrhage is external uterine massage. Should this fail then hot water at 118 deg. F. in large quantities, the intrauterine tube being passed up to the fundus. Next the hand may be introduced into the uterus, especially if a part or whole of the placenta be retained. This should not be done except when the indications are clear.

Next in order comes bimanual compression, but he prefers gauze plugging of the uterus.

Drawing down the uterus is to be tried if the plugging fails. The injection of iron he has not used for the past five years, as it

is a remedy attended with danger, causing a certain amount of superficial injury to the uterine wall.

The plan of treatment outlined above applies to cases of uterine inertia, giving rise to hemorrhage after the birth of the child and delivery of the placenta.

In all cases where the hand is introduced the uterus must be afterwards douched very carefully with a hot creolin solution.

Ruptured Urethra.

Nathan Jacobson, in the New York Medical Journal for November 10th, reports four cases of ruptured urethra and gives his plan of treatment.

He advises against the repeated introduction of a catheter through the urethra into the bladder. This plan fails because the lacerated parts are subjected to still further tearing, or at least to frequent irritation and urinary leakage is not absolutely avoided. The wearing of a permanent catheter is not advisable, as the urine salts collect about the tube, the instrument becomes speedily unclean and in the end we have a septic condition.

The most satisfactory drainage of the bladder and soft parts is accomplished by perineal incision. A generous incision permits free drainage of the lacerated tissues, the introduction of a perineal tube into the bladder and thorough drainage of this viscus.

The tube is removed each day for cleaning and the bladder well irrigated. The canal is soon reformed and it is shaped by the passage of a full-sized sound daily beginning on the third or fourth day.

Stomach-Tube Habit.

In the Therapeutic Gazette for November, John H. Musser writes of the use and abuse of lavage. He says that not five per cent. of the cases of gastric disease or of patients suffering from symptoms suggestive of gastric disease, require lavage in their treatment.

He employs lavage in atonic dilatation where the retention is extreme, in cases of organic pyloric obstruction, in cases of gastric neurasthenia and in certain cases of hysteria, in cases of chronic gastritis with subacidity.

So then lavage is not essential except in a few cases. The patient should never be allowed to use the tube himself, as it soon develops the habit. Then every ache or sense of distress, every eructation or heartburn invites the use of the tube. He says that this habit can not be too strongly condemned.

Spermin in Pulmonary Phthisis.

Four cases of consumption treated by spermin are reported by Thomas J. Mays, in the *International Medical Magazine* for November. From five to ten minims of Krieger's spermin were injected at a dose.

From these observations it appears that the hypodermic injection of spermin diminished the temperature somewhat and reduced the pulse and respiration rate in these four cases—the influence on the pulse frequency being the most marked in this respect. In two of the patients the injections were followed a number of times by a feeling of warmth and well-being over the whole body, which in the course of half an hour or an hour gave way to quietude, and sometimes to a disposition to fall asleep. There was no gain in flesh, and from this limited experience it does not seem as though the spermin injections are of permanent value in the treatment of phthisis.

Some Problems Pertaining to Tuberculosis.

This subject should be studied from two points of view, says A. Mansfield Holmes in the *Denver Medical Times* for November, from the view point of the patient and from the view point of those who are not afflicted with the disease but who are obliged to associate more or less with those afflicted.

He says that at health resorts there should be less danger to the well and better care for the afflicted. To secure such ends he recommends that States possessing climatic advantages favorable to tubercular persons should not quarantine against tuberculosis. Patients coming to these resorts should come early.

Each State blessed with the conditions producing a congenial climate for such persons should enact and enforce rigid sanitary and preventive measures against infection from tuberculosis.

The general public in all States should receive systematic instructions; it should be the purpose of all to ascertain the true sources of tubercular infection, and our States and cities should formulate rational rules to prevent and overcome these sources of danger.

These rules for the public should become popularized through the daily press and public schools, and literature should be freely circulated by boards of health.

Rules should be formulated for the government of households in which some member is afflicted with tuberculosis, to guard against the infection of the well members.

Rules for the safe deposition of tubercular

secretions should be concisely formulated.

Precautions should be taken against infected foods; dairies should be carefully inspected and the tuberculin test periodically given to dairy cattle.

Rigid precautions should be taken in cities located in health resorts where tubercular persons congregate.

The compulsory reporting of tubercular cases should be demanded by boards of health, and apartments occupied by all persons thus reported, should be periodically fumigated.

As far as possible, tubercular persons should be prevented from congregating in thickly settled districts. Many persons would go to ranches, or less densely populated regions, but these are destitute of the real necessities which are important in the treatment of this disease.

Suprarenal Capsule in Diseases of the Lower Air Passages.

Sam'l Floershiem, in the *Medical Record* for November 17th, makes a preliminary report on the use of suprarenal capsule in diseases of the lower passages. Seven cases are reported and some conclusions given.

Indications for suprarenal powder: The suprarenal powder is indicated in acute and chronic bronchitis, bronchiectasis, asthma, congestion and œdema of the lungs, hæmoptysis, and in some cases of pulmonary tuberculosis, especially in those associated with hæmoptysis.

Method of administration: The suprarenal powder was administered in the form of three-grain capsules on account of their convenience. The powder is to be chewed without water and then to be swallowed in a few moments.

Rapidity of the action of suprarenal powder: The action became apparent in from two to fifteen minutes.

Permanence of the action of suprarenal powder: In some cases the action of the suprarenal powder was permanent, while in the majority of cases the action was temporary, continuing from ten minutes to six hours.

Sulphate of Magnesia

N. F. Howard, in the *Atlanta Journal-Record of Medicine* for November, says that salts is a potent remedy particularly in inflammation. He remarks the change of sentiment in regard to its use in puerperal peritonitis, and says that it is good when applied in solution locally. In burns the saturated solution will relieve the pain in a moment.

The sting of insects he has also treated

with this solution with the best results.

Bruises, contusions, lacerations, etc., are treated in the same way with entire relief.

He reports two cases of severe sprains successfully treated with salts, also a case of erysipelas and several cases of scalp eruption.

Syphilitic Gummata of Spinal Cord.

F. W. Campbell, in the Canada Medical Record for October, reports a case of syphilitic gummata of the spinal cord successfully treated by large doses of iodide of potash.

The patient began with 60 grains three times daily and the amount was gradually increased until he took 500 grains daily. The potash was dissolved in vichy water, and the patient took a drink every now and then.

On one occasion he took 250 grains at one dose. For seven weeks he took 500 grains daily, and was completely restored to health.

Scarlet Fever.

Jay F. Shamburg, in the Journal of the American Medical Association for Nov. 10th, writes of a clinical and pathological study of the rash of scarlet fever with special reference to the origin and character of the desquamation.

He gives a number of cases in detail and concludes:

The color of the rash in scarlatina varies in different individuals, and at different times in the same. Accurately speaking, it is never scarlet and only occasionally bright red. More commonly it is dull red with an appreciable element of brown.

There are other elements of the eruption of scarlet fever besides the erythema, namely, puncta, vesicles and goose-flesh papules, and these lesions occur with a considerable degree of constancy.

Vesicles are far more common in the rash of scarlet fever than is ordinarily believed. They are more profuse in intense eruptions, although they be present in mild ones. The amount of desquamation is as a rule proportionate to the degree of vesiculation. Vesiculation may be so copious as to deceive the physician in his diagnosis.

Desquamation on the body begins as pinpoint, powdery scales at the summits of the desiccated vesicles. Irregular or jagged rings of desquamation then form, which enlarge until the horny layer is completely shed.

Historically, the rash of scarlet fever is a dermatitis exhibiting deep and extensive changes in the corium. The greatest de-

gree of inflammation is exhibited about the hair-follicles which are frequently disintegrated by a seat either in the epidermis or in the walls of the hair-follicles. The persistence of desquamation and of the infectivity of the scales is to be accounted for by the depth of the pathological process in the skin.

Spina Bifida.

W. B. Wilson, in the American Journal of Obstetrics for October, discusses the condition known as spina bifida. In the treatment he says we must first know as to the extent of the sac, condition of the coverings, character of contents, degree of osseous separation and as to the general condition of the infant.

The methods of palliative treatment are the elastic ligature, acupuncture, injection of irritating fluids and electrolysis. The radical treatment consists in the removal of the tumor by absection followed by direct closure of the incision.

According to Werintz in 153 cases in which the radical operation was done, 87 recovered and 76 died. The dangers are sepsis and the consequences of disturbed pressure in the cerebral circulation.

Treatment of Croupous Pneumonia in Hospitals

In the International Medical Magazine for October, Julius J. Salinger says that the hospital physician meets with two varieties of croupous pneumonia, the robust or sthenic and the alcoholic or asthenic, and these require independent treatment. The diet should be nutritious and easily assimilable. For the pains an ice-bag is applied over the affected side, or when this is not well borne a mustard plaster or turpentine stupe. Morphia, hypodermically, gives prompt relief. Poulitices and cotton jackets are of doubtful utility. Blisters are an unnecessary hardship. Venesection is indicated in some cases.

For the cough small doses of opium are given. The temperature, as a rule, needs no special treatment.

For shortness of breath, the inhalation of oxygen, or strychnine by the mouth or hypodermically, are indicated.

Alcohol is not necessary as a routine measure. For the insomnia use sulphonal or trional, and in some cases the hydrobromate of hyoscin.

At the time of crisis or during the stage of resolution the salts of ammonia are useful, the carbonate being the most generally employed. During convalescence give tonics. In delayed resolution the use of small blisters and the iodides are valuable.

Suprarenal Capsule.

In the Interstate Medical Journal for November W. H. Bates makes some further observation on the clinical application of the suprarenal capsule.

The dried and powdered capsule he thinks best. Its chief use is in diseases of the eye, ear, nose and throat, also in uterus and urethra and in heart disease.

He emphasizes two points of causes of failure in the use of this agent.

First.—The local use of the aqueous extract is invariably followed by the characteristic contraction of the vessels in all tissues, but when the drug is administered internally, its action is less constant and the result cannot be accurately predicted.

Second.—The action of the suprarenal follows its administration at once. If it does not take place as expected, remember its incompatibility, and be sure you are using suprarenal whose active principle is unimpaired, and not using an unknown drug resulting from chemical union with a so-called preservative or from decomposition.

Tuberculous Lesions.

The Canada Medical Journal for September has an address by Edmund Owen on tuberculous lesions from a clinical point of view.

He says that there are three great factors in connection with tuberculosis which the public must be made acquainted with: 1. The disease is communicable, but the public must be allowed a little time before they accept this statement and fact. 2. The disease is preventable; this follows almost as a corollary to the first statement. 3. The disease is curable. Years ago, the subject of tuberculosis was regarded as well-nigh hopeless, but now we do not consider it of the untractable nature that it was formerly considered. Tuberculous lesions are exactly what they used to be, and Mr. Owen has worked at the largest Children's Hospital in London for over a quarter of a century. We now take a much more hopeful view of these lesions. One rarely hears of the *vis medicatrix naturae*; surgery has rendered it superfluous. All have noticed cases of old standing hip joint disease where in time the boy actually grows out of his trouble. This may be a popular superstition, but, like most erratic beliefs, it is founded upon a stratum of truth. In children these chronic diseases are always tuberculous. Where chronic abscesses occur it will not do to open and drain, but they must be scraped out, their unhealthy lining destroyed. In the treat-

ment of these diseases, he stated that he had failed to find any virtue whatever in the employment of iodoform. It is an irritant and a poison, and it is apt to be septic, as germs can grow on it. Mr. Owen condemned the use of complicated apparatus, and also the forcible correction in cases of spinal deformities. He considers that this deformity does not lend itself to operative treatment. There may perhaps be a small class of cases where it may eventually be found applicable, as where bone or organized inflammatory deposits press upon the cord so that the patient has lost movement in the lower extremities. The plaster of Paris jacket must be held responsible for much of the deformity of Potts' Disease. The proper treatment of these cases is rest in the horizontal position, with plenty of good fresh air and sunlight.

Typhoid Fever.

Wm. R. Stokes in the Maryland Medical Journal for November gives the results of some experiments to determine the role of the domestic animals in the causation of typhoid fever. The animals experimented with were two chickens, two white rats and a calf six weeks old, four pigs and two rabbits.

He gives the following conclusions:

In our experiments we have endeavored to produce infection through the natural route and by natural means by simply allowing the various animals to take in very large quantities of typhoid bacilli in their daily food. Although at least 500 colonies from the feces were carefully tested, we were not able to demonstrate the presence of any typhoid bacilli in two chickens, two white rats, two rabbits, two guinea-pigs, one calf, and two pigs. Although we have not employed a large number of animals, we feel justified in expressing the opinion that the typhoid bacillus cannot, as a rule, maintain its struggle for existence in the intestines of the domestic animals. We therefore conclude that the dejecta of animals play no considerable part in the distribution of typhoid fever.

Typhoid Fever Feeding.

George W. Moorehouse in the Boston Medical and Surgical Journal for November 15th, discusses the feeding in typhoid fever.

He gives the diets in use at the Lakeside Hospital.

Milk diet.—The standard for a milk diet shall be 8 ounces every two hours, subject to special directions as to night feedings. Watch stools for undigested

milk. Report and record failure to take full amount.

Liquid typhoid diet.—In twenty-four hours: Milk, 8 ounces four times; milk, 6 ounces with tea or coffee, $\frac{1}{2}$ to 1 ounce twice; albumin water, 8 ounces twice; beef tea, 8 ounces; malted milk, 8 ounces once; chicken broth and barley water, each 3 ounces; beef juice and barley water, each 3 ounces. Those liquids which are to be given only once in twenty-four hours may be replaced by equivalent amounts of any of the following: Broths, milk-whey, slip, junket, strained soups or gruels.

Soft typhoid diet.—Add to the liquid or milk diet; (1) Ice cream, well-cooked rice (boiled), broths may be thickened with it; (2) soft boiled or poached egg on soft toast, blanc mange and milk puddings, calf's foot and other gelatine; (3) gruels, crackers or bread softened in milk or broths macaroni, finely minced and scraped meats. The increase in diet to be very gradual, one addition the first day, two the second, etc., scraped beef on the fourth or fifth day.

Typhoid convalescent diet.—Add to anything already given the following in about the order mentioned. Soft parts of oysters, a tender sweetbread, chop, squab, game (small), chicken, fish, cutlet, steak rare roast beef. Mealy baked potato may be given with any of the meats.

Full typhoid diet.—Six A. M., milk; 8 A. M., breakfast, a cereal with cream and a small amount of sugar if desired, milk with tea or coffee, egg on toast, bread or toast with butter if desired; 10 A. M., bread and butter, with gruel or milk, or broth with egg; 11.30 A. M., dinner, soup which may be thickened, some meats, as chop, or cutlet, or fish, or steak, or roast beef, or the soft parts of oysters, or sweetbread, or squab, or small game, mealy baked potato, or rice, or macaroni, or spaghetti, with a simple dessert, as ice cream, or blanc mange, or milk pudding; 2 to 3 P. M., like 10 A. M.; 4 to 4.30 P. M., supper, creamed chicken, or a bit of cold meat, as chicken or roast beef, bread, and milk flavored with tea or coffee; 6 P. M., cocoa or gruel or broth. At night, milk two to four times.

These directions are furnished with the diet lists. Any change from a less to a more generous diet must be gradual. The between-meal feeding of liquids are important as limiting the amount of solid food taken at one time, their importance increasing in proportion to the earliness of the order for the generous diet.

Tubo-Ovarian Abscess.

According to the New York Lancet for October, Edwin Ricketts says that tubo-ovarian abscess is frequently caused by the proximity of the ovary to an infected fallopian tube.

The disease may be complicated by normal or ectopic pregnancy, intestinal, vaginal, or vesical fistule, and by appendicitis.

In the dormant stage operate by the abdominal route.

In the acute stage explore by the abdominal route, then decide between completing the operation in one or two sittings, as has been suggested.

Following abortion or delivery at full term, vaginal drainage often puts the patient in better shape for an abdominal section later on.

Uterine Displacements.

Chas. A. L. Reed, in the American Journal of Obstetrics for November, writes of the surgical treatment of uterine displacements.

In the cases of retrodisplacements that demand operation at all, he says that the intraperitoneal shortening of the round ligaments is the operation of choice. A letter of S fold is made in the ligaments and they are stitched thus folded to the parietal peritoneum along the line of Poupart's ligament. However, the parietal fixation of the folded ligament is not necessary.

He shows a forceps to catch and fold the ligament without injuring the tissues. The forceps are an inch broad and have four prongs sufficiently far apart to allow a needle to be easily passed between them.

In old flexions, particularly when associated with diffuse fibrosis, he advises the taking of a wedge shaped segment from the elongated and hypertrophied wall. This operation may be done in either anterior or posterior flexions, taking care not to go into the cavity of the uterus or to wound the circular artery.

Uterine Fibroids.

In the American Journal of Surgery and Gynecology for November, F. A. Lockhart discusses the operative treatment of uterine fibroids.

He says that a uterine fibroid should not be interfered with unless it is giving rise to serious symptoms, be they mental or physical, notwithstanding the statement of one gynecologist (Gordon of Portland) that he removes all fibroids which he meets with in practice whether they are causing trouble or not.

Curetting is merely a palliative measure,

as is also in many cases ligation of the uterine arteries.

Removal of the appendages ought to be merely a dernier ressort as it practically never cures and does not always even relieve.

The operation of selection should be either total hysterectomy or myomectomy.

Myomectomy is to be chosen (a) where the tumor is sub-mucous and pedunculated; (b) where it is sub-serous and either has a pedicle or its border is well defined; (c) where several small nodules lie immediately beneath the peritoneum.

Total hysterectomy is indicated (a) where the tumor is sub-mucous and non-pedunculated and the cervix cannot be dilated sufficiently to allow of morcellement; (b) where the tumor is either interstitial, large and sub-serous without a pedicle, soft, fibrocystic, or undergoing degeneration; (c) where the tumor is complicated by diseased adnexa.

MISCELLANEOUS.

Compound Fracture of Humerus.

By T. J. Biggs, M. G., Stanford, Conn.

Joe Pettig, Stamford, Slav, age 30, first seen September 29th, 1898. On this, case of compound fractures of humerus resulting from a violent blow, I was called in consultation by two professional brethren, and on account of the extent of the injury and the poor surroundings for nursing, I advised coming into the hospital, but this the patient refused. so the treatment and operation were carried out at his home. September 30th, assisted by Drs. Phillips and Hoyt, I cut down over the humerus, the incision extending from the insertion of the deltoid down to the lower end of the shaft. After reaching the bone, a careful search was made for spiculæ, and six were removed. The wound was then thoroughly washed out, and the bones were brought in opposition and drilled for wiring together. Instead of silver wire I used silkworm gut, and brought the bones together in three places, fractures being just below the insertion of the deltoid, about the middle of the shaft. After depurating this cavity with the bovine hydrozone reaction and Thiersh wash, and thoroughly drying it, a piece of plain bi-sterilized gauze was inserted and packed gently all around it at different points of fracture, carefully adjusted, and bovine pure was poured into the wound; then an ordinary bandage was

placed over it. The arm was put up in an anterior-posterior splint, and dressed according to the method in fractures of the humerus. Over the dressing was applied a plaster of Paris bandage, which was allowed to dry and a trap-door cut through it to admit the application of bovine which was made freshly every hour for the next forty-eight hours, just sufficient to keep the gauze within moist. At the end of forty-eight hours, the gauze was removed and depuration and dressing repeated with gauze packing which was moistened with bovine as before, once in two hours. After the next forty-eight hours all this was repeated again, and so on until October 10th, when the gauze packing was discarded and bovine pure was directly applied, dropping it into the wound once in two hours, and depurating over again twice in every twenty-four hours. On the 21st, the plaster of Paris cast was removed, and an ordinary tin splint was employed. By the 25th the bones had become firmly reunited, and the strands of silkworm gut used to keep them together had been mostly absorbed and removed. The wound was now closed and dressed with bovine twice a day. On the 31st, the wound was entirely healed, a light plaster of Paris splint was applied to give support to the arm, and the case was discharged cured.

Points of great interest in this case are the short time in which the bones thoroughly united and the wound healed; usually six weeks being required for ordinary transverse or oblique fractures to unite, while here and there were two or three points of fracture and compound at that, yet the whole repair was completed in thirty-four days. From my experience in the treatment of this case with applied blood, I am convinced that if all fractures were treated by the open wound method, using bovine blood to hasten repair, no such thing as deformities or ligamentous unions need ever result.

It has been considered until recently that it was almost impossible to produce cheese from pasturized milk, but a short time ago a chemist of Stockholm succeeded in effecting a preparation that solved the difficulties. Owing to this discovery, the product of which has been named "caseol," palatable and nourishing cheese, free of tubercular bacilli, can now be made from pasturized skimmed milk. This preparation has, moreover, the excellent quality of rendering cheese more digestible. Several dairies in London have made experiments with "caseol" with the same favorable result.—*Scientific American*.

A Wail of Disappointment.

An Eastern concern, which makes an imitation of Gude's "Pepto-Mangan," and for years has traded upon the reputation which this preparation has earned for itself, has recently sent broadcast to the medical profession of America a circular letter, in which, after bewailing the enormous returns brought by the "unethical methods" of other manufacturers, modestly refers to its own "ethical" virtues, and expresses the belief that, in spite of present non-appreciation of these virtues by the doctors, "the day will come when physicians will realize the importance of ceasing to be the *instigators and propagators* of the popularity of certain proprietaries" and will patronize "ethical preparations"—like *theirs*, for instance.

This, to say the least, is a very left-handed compliment to the great body of the medical profession, who will not be slow to catch its drift, or fail to inquire wherein consists the "ethicalness" of the methods of the concern who thus sharply takes them to task for preferring a genuine to a spurious article.

Druggists, as a rule, are not much interested in the quibbles of the doctors on questions of "ethics," but in this matter most of them will recognize in the circular referred to, a wail of disappointment and an effort to draw attention away from the methods adopted by its authors to supplant the preparation thus covertly assailed by them with their own imitation thereof.

The time has gone by when either doctor or druggist can be deceived by any such false play. Every member of both professions knows that "Gude's Pepto-Mangan" is a preparation of genuine value, manufactured on scientific principles, by reliable men, and introduced to physicians in an ethical manner, solely on its merits, and for these reasons physicians will continue to be "instigators and propagators" of its popularity, just as the druggists will continue to keep in stock an article for which there is a steady demand and a ready sale.—*Reprinted from The National Druggist, St. Louis, Mo., November, 1900.*

The Proper Dosage of Remedies.

How often does it occur that a patient will not improve, but remains in statu quo, under the medication of a competent man who is perhaps a little too careful. But when at the advice of a colleague larger doses are given, it is not unusual for the patient to make a rapid recovery and to see the same treatment, suggested more by expe-

rience than by text books, crowned with success.

And this is the condition of affairs not only with Galenical preparations, but with reference to proprietary remedies which have come to stay. It will be found by all who will investigate them that they are generally safe, but that the doses are as a rule somewhat too small. The manufacturers are naturally guided in their dosage by the standard works on materia medica and will not transgress the limits there set down. This is certainly a wise procedure on their part and yet a certain latitude may be taken with the directions concerning dosage. Thus in the treatment of rheumatism, tongaline may be given in doses of three teaspoonfuls and even of four if the exigencies of the case demand it, despite the fact that the manufacturers advise but one or two.

Far be it from us to desire to become the advocates of heroic medication. If such is really necessary, counsel should be first sought in order to avoid all possible danger. On the other hand, too much timidity is reprehensible and familiarity with drugs, their doses and action will soon put the physician in the position of being able to use them to greater advantage to himself and to his patient.—*Ohmann-Dumesnil, M. D., in the November issue of the St. Louis Medical and Surgical Journal.*

As Chinese affairs are very much to the fore just now, it may be interesting to mention that a doctor's fee is perhaps the smallest in the world, ranging from four to ten cents, but this can be accounted for by the fact that any one can practice, it only being necessary to hang out a sign intimating the fact that the owner has some medical knowledge; and although these are very numerous, they are, as a body, the most respected men in China.—*Medical age.*

An editor, in describing a certain professor's clinic on Orificial Surgery, says that it was ripe and brimful of juiciness. Further along he says that the orificial idea permeates to the very depths.

These facts have been apparent to most men for years.

A Question of Funds.

"My doctor ordered a trip to Europe for me?"

"Did you follow his direction?"

"No. He presented his bill and then took the trip to Europe himself."

Rockbridge, Va., Alum Water.

That are of Intrinsic Value to the Medical Profession.

Extract from a paper read before the Atlanta Society of Medicine, April 26, 1887, by JOHN S. TODD, M. D., Professor Materia Medica and Therapeutics, Atlanta Medical College, Ga.; Ex-President of Georgia Medical Association; not read in our interest, but in the interest of Science and his profession:

"Some four and a half years since I had, among other cases, one of dysentery, which resist ing all medication, became chronic, and a LARGE ULCER OF THE RECTUM DEVELOPED. I called in consultation a noted surgeon. The patient's condition was one of extreme emaciation; blood and mucus in large quantities were voided about an average of once an hour. The dose of opium had been increased to 3 dr. laudanum in twenty-four hours and $\frac{1}{2}$ gr. morphine twice a day, and still matters grew worse. We decided to inject solution 30 grs. to oz. nit. silver in rectum. The result was a COLLAPSE that nearly proved FATAL. Upon it being suggested later that the operation be repeated, the patient, a young man, said if we and his family insisted, to avoid it HE WOULD COMMIT SUICIDE. Dr. W. S. Armstrong was then called in with me. He suggested an exclusively milk diet, gradual reduction of opium, and ROCKBRIDGE (VA.) IRON AND ALUM WATER. Immediate improvement set in, and in TEN DAYS so great was THE CONSTIPATION that oil and enemas had to be resorted to to procure an evacuation from the bowels. Since that time I HAVE TREATED SEVERAL CASES EQUALLY AS BAD, WITH SAME HAPPY RESULT, using same diet and medicines, for of all agents for this disease, I consider THE ROCKBRIDGE ALUM AND IRON WATER THE FIRST. It is equally EFFICACIOUS in CHRONIC DIARRHŒA, AS MY RECORDS ATTEST."

DR. TODD, March 21, 1900, writes: I have for 16 years used these GRAND WATERS constantly in my practice with increased and increasing satisfaction, I inclose you article written 3 years ago on opium. "In chronic diarrhœa and dysentery, the milk diet, ROCKBRIDGE ALUM WATER, and small doses of opium given cautiously—very cautiously lest your patient acquire the opium habit—has proved so INVARIABLY SUCCESSFUL with me, that I have COME TO TREAT THESE ASSES with ϕ CONFIDENCE BORN OF SUCCESS."

DR. HUNTER MCGUIKE, Virginia's great surgeon, says: As an astringent and tonic it is one of the most valuable I have ever used.

DR. S. GAILLARD THOMAS, Professor College of Physicians and Surgeons, N. C.: Most efficient astringent and tonic waters I have ever employed.

Write JAMES A. FRAZIER, Mgr. Receiver, Rockbridge Alum-Springs, for Pamphlet.

Incompatibilities of Heroin and Heroin Hydrochloride.

Heroin and heroin hydrochloride form an essential part of so many formulæ for the relief of cough, dyspnea, and pains in the treatment of respiratory affections that it is important to determine in what combination they will prove most effective, and what are their incompatibilities. Owing to the insolubility of heroin in watery solutions it is necessary to add a few drops of some acid, acetic or hydrochloric, in order to effect its solution. This can be entirely obviated by using the hydrochloride, which is freely soluble. The only incompatibilities of heroin and the hydrochloride worthy of special mention are the alkalies, such as bicarbonate of sodium and carbonate of ammonium. On the other hand, salts of neutral reaction, such as iodide of potassium or chloride of ammonium may be in the same mixture, and this also applies to acid salts, such as the hypophosphites or acid phosphates. The vegetable expectorants, as ipecac, senega, squill, and sanguinaria, are entirely compatible with heroin and its hydrochloride. Although many physicians employ heroin without admix-

ture very desirable results have been reported from combinations with iodide of potassium, chloride of ammonium, and the vegetable expectorants, according to the indications present in particular cases. A word as to the dosage of heroin and heroin hydrochloride may be of interest here. The large doses at first recommended at the time of the introduction of heroin are no longer preferred by the majority of authors, the average dose ranging from 1-24 to 1-12 grain in adults, and 1-120 to 1-60 grain in children. It is advisable not to employ larger doses until the smaller ones have been given a trial. Furthermore, many physicians now resort to the hypodermatic use of heroin hydrochloride in cases in which it is desirable to obtain an immediate effect, and especially in the treatment of spasmodic conditions, such as asthma, care being taken in the preparation of solutions not to add the drug until the water has partially cooled.

Twenty thousand dollars has been agreed upon as an appropriation by the Canadian National Sanatorium Association for the erection and equipment of a free sanatorium for the treatment of tuberculosis in Toronto, Canada.—*Medical Age*.

The Treatment of Syphilis with Bin-iodized Oil.

By Dr. P. Chapeile, Paris.

The "specific bin-iodized oil," recommended by Panas, Dieulafoy, Lancereaux, Brissaud, Fournier and the leading specialists for the diseases of the skin, is a very dilute and unsatisfactory preparation, but a great improvement in the administration of mercury, has been recently made, by utilizing the solubility of *nascent mercuric iodid* in a strictly neutral aseptic oil, which keeps indefinitely.

The "specific bin-iodized oil" which contains one per cent. of HgI_2 , has been aptly called Cypridol, (a name which gives no clew to the patient or to those around him as to the nature of the medicament), can be used either hypodermically or taken in capsules.

Cypridol is vastly superior to the usual soluble or insoluble mercurials, the assimilation and subsequent elimination of which is uncertain, while salivation, vomiting and diarrhœa are amongst the least of their disadvantages.

Since Ricord's time, insoluble mercurial treatment has been largely adopted on account of the severity of the soluble salts, but their assimilation is slow, irregular and gives rise to considerable trouble in the alimentary canal, even when given in combination with small doses of opium. All disadvantages of this nature, which are inevitable with soluble and insoluble mercurial preparations, are avoided with Cypridol, which does not affect the stomach or digestive organs and rarely produces salivation even in massive doses. It is conveniently exhibited in capsules of 20 centigrammes each of which represents exactly 1-32nd of a grain of mercurial iodide.

One capsule should be taken with the two principal meals daily, and this dose may be increased to five capsules daily, but should not be exceeded, except under special conditions dependent on the susceptibility of the patient to the treatment.

Our experience in the clinics, show that it is advisable to commence the treatment of the capsules or injections of Cypridol (or to alternate their administration) as soon as syphilis is recognized and to continue it for three consecutive years, even if there is an apparent cure after a short time.

During the first three months, the treatment may be suspended eight days every month, during which interval, small doses

of iodide of potassium, sodium or strontium are given.

For the following three months, the Cypridol treatment should be administered every alternative fortnight, and after that, eight days of each succeeding month.

This radical treatment with Cypridol, will insure the patient's permanent cure; it is indispensable however to maintain the best hygienic conditions of life.

Frequently, but not too prolonged hot baths; washing, to free the skin from irritation are useful, and care should be taken to keep the buccal cavity exceptionally clean by careful washing and gargling of the throat with boracic acid and chlorate of potassium. An ointment of the same should be used to anoint the genital and anal orifices.

The great antiseptic and antizymotic value of Cypridol can be utilized in a great number of cases.

It constitutes an excellent specific for bacteriological affections or parasites of the alimentary canal, the skin and the scalp and is indicated in the treatment of serous affections, fistulas, cold abscesses, white tumors (in hip, knee, ankle), lupus, spina ventosa and other manifestations of tuberculosis.

Successful experiments have been made in the Paris Hospitals on neoplasms, anthrax, furunculosis, paludal intoxication and in the great majority of epidemic diseases.

The Tri-State Medical Association of the Carolinas and Virginia will meet on February 26, 1901 at 10 o'clock A.M., at the Jefferson Hotel, Richmond, Va. All Fellows desiring to read papers will please communicate with the Secretary, giving title, not later than January 15, 1901. All Fellows who have not paid their dues are requested to do so at once, as funds are needed to defray the expenses of the meeting.

J. N. UPSHUR.
Secretary and Treasurer.

A somewhat clever ruse, practiced for the purpose of administering cod-liver oil to those who object to it, is described as breaking up a conspiracy among the patient's olfactory, optic, and pneumogastric nerves. The patient probably confesses he likes sardines, so without his becoming aware of the trick, the preservative cottonseed oil is emptied away, and the sardine box is filled with fresh cod-liver oil, of which every day the patient unconsciously takes a substantial amount.—*Medical Age*.

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The word Listerine assures to the Medical Profession a non-poisonous antiseptic of well proven efficacy; uniform and definite in preparation, and having a wide field of usefulness.

On account of its absolute safety, Listerine is well adapted to internal use and to the treatment of Catarrhal Conditions of the mucous surfaces.

LITERATURE DESCRIBING THE BEST METHODS FOR USING

Listerine in the Treatment of Diseases of the Respiratory System

WILL BE MAILED TO YOUR ADDRESS, UPON APPLICATION.

We beg to announce that, in addition to the 14 oz. bottle, in which Listerine is offered to the trade, the pharmacist can now supply a smaller package, containing 3 fluid ounces, which is put up for the convenience of practitioners who prefer, upon certain occasions, to prescribe articles of established merit in the Original Package, under the seal and guarantee of the manufacturer.

FOR DISEASES OF THE URIC ACID DIATHESIS:

Lambert's Lithiated Hydrangea

RENAL ALTERNATIVE--ANTILITHIC.

The ascertained value of Hydrangea in Calculous Complaints and Abnormal Conditions of the Kidneys, through the earlier reports of Drs. Atlee, Horsley, Monkur, Butler and others, and the well-known utility of Lithia in diseases of the uric acid diathesis, at once justified the therapeutic claims of LAMBERT'S LITHIATED HYDRANGEA when first announced to the medical profession, whilst subsequent use and close clinical observation has caused it to be regarded by physicians generally as a very valuable Kidney Alternative and Antilithic agent in the treatment of

Urinary Calculus, Gout, Rheumatism, Cystitis, Diabetes, Hematuria, Bright's Disease, Albuminuria, and Vesical Irritations Generally.

Realizing that in many of the diseases in which LAMBERT'S LITHIATED HYDRANGEA has been found to possess great therapeutic value, it is of the highest importance that suitable diet be employed, we have had prepared for the convenience of physicians,

DIETETIC NOTES.

suggesting the articles of food to be allowed or prohibited in several of these diseases. A book of these Dietetic Notes, each note perforated and convenient for the physician to detach and distribute to patients, supplied upon request, together with literature fully descriptive of LAMBERT'S LITHIATED HYDRANGEA.

LAMBERT PHARMACAL CO., ST. LOUIS.

A City's Right to Establish Pest Houses.

A suit was recently brought against the city of Chicago by the owners of land near the smallpox hospital, opened by the municipal authorities on Lawndale Avenue in 1896, to recover damages alleged to have been sustained by their property in consequence of the proximity of this institution. The plaintiffs have been finally defeated in the supreme court of Illinois. It was not asserted that the city had been negligent in the care and conduct of the hospital, or that it was any more of a nuisance than such an institution must be of necessity. The supreme court held that there is no difference in principle between the right of a municipality to establish a pest house and its right to build a jail or fire-engine house.—*Medical Record*.

What right has any firm, whose business is to furnish the physician with his principal weapons, to place upon the market pharmaceutical preparations of unknown medicinal value? Should we not expect, yes, even demand, that the producer of fluid extracts make his products conform to some standard of excellence—that he shall indicate what effects his fluid extracts may be expected to have ere he sends them forth from his laboratory?

It has been shown that even drugs selected with care vary most extraordinarily in their percentage of active principles. Witness, for example, this statement by the editor of a leading pharmaceutical journal (*Bulletin of Pharmacy*, January, 1899), who knows whereof he speaks:

"Professor Puckner assayed nineteen samples of belladonna leaves procured, mind you, from dealers who were told that only the best was wanted, and that purchase would depend upon the results of assay. He found these nineteen samples to range in alkaloidal content from .01 to .51 per cent! The strongest sample 51 times as strong as the weakest."

The most careful treatment of such drugs, with the choicest menstrua, and by the most approved processes, will yield preparations that may be fair to look upon, but in medicinal value they will vary just as much as the crude drugs from which they are made. The compensatory remedy for this unfortunate condition is standardization—chemical standardization when practicable, and when that method is inadmissible, as it often is, physiological standardization. It has been found that certain important drugs cannot be assayed chemically, as their medicinal virtues reside in unstable bodies, and these are readily decomposed

in the analytical processes. For this reason the strength of such powerful and useful drugs as digitalis, aconite, convallaria, strophanthus, ergot, cannabis Indica and many others cannot be determined satisfactorily by the analytical chemist. However, the problem which proved to be an insurmountable difficulty to the chemist, was solved by the pharmacologist with ease. He tests upon living animals all drugs that cannot be assayed chemically. Dogs, rabbits, fowls and guinea-pigs receive doses of the preparations under examination. Accurate observations of their physiologic effects are made, variations are noted and correspond in medicinal strength with the adopted standard extracts.

Formerly the physician was obliged to make his own physiologic tests of ergot, digitalis and so on; not upon dogs and guinea-pigs, however, but upon his patients. The old way was to begin with small doses of powerful drugs and then to push them until the desired effect was produced. The new way is a much better one; it is safer for the patient, more satisfactory to the physician, and it is more scientific. Prompt results are assured, for the physician knows just how much fluid extract of ergot, aconite or cannabis Indica he need include in his initial dose to secure a definite result.

The name of the greatest pharmaceutical manufacturing house in this country is so closely linked with the phrase, "drug standardization," that the mere mention of one suggests the other. Parke, Davis & Co., began years ago to manufacture a full line of standardized fluid extracts that are guaranteed to be of definite and uniform strength. More recently they devised and perfected methods for standardizing physiologically those important drugs that are incapable of analysis by chemical processes. Parke, Davis & Co., have done a great deal for the medical profession and for humanity, and standardization, more especially physiological standardization, is one of their greatest achievements.

Messrs. Reed and Carnrick have just issued a neat pamphlet on "Microscopical Reproductions of the Blood and Bacteria, with full directions for preparing specimens for diagnostic purposes. It is illustrated with a number of well executed cuts in color showing the appearance of the blood under the microscope in health and disease. The common bacteria are also shown in the color of their appropriate stain. This very handy little work is for distribution among the profession.

IODOZEN—MERRELL.



IODOZEN—an iodine derivative of methyl salicylate (true oil of wintergreen) it has an agreeable odor, is non-irritant, and combines the antiseptic, discutient, alterative and absorbent qualities of iodoform without any of its characteristic disadvantages.

The iodine being liberated very slowly in the presence of heat and moisture, no toxic effects may be apprehended.

The density of Iodozen is less than that of iodoform, hence a given quantity will cover a larger surface; it is, therefore, more economical.

Iodozen is absorbed slowly and adheres to sores and mucous membranes for a considerable period, and in the meantime exerts a protective as well as antiseptic effect.

These qualities place Iodozen in the front rank of antiseptic applications in the treatment of aural, venereal, and cutaneous diseases, in minor surgery and catarrhal affections of the uterus and nasal mucous membranes.

Iodozen, when mixed with powdered boracic acid in the proportion of 5 to 10 per cent. and used by insufflation, is of value in post-nasal catarrh and ulcerated conditions of the throat, but in specific lesions it is advisable to apply Iodozen pure, in order to produce the necessary antiseptic impression.

A useful dusting powder for the chafing of infants is made by combining Iodozen 5 per cent. with powdered starch—in erysipelas, Iodozen may be advantageously applied to the inflamed surface undiluted.

Combined with vaseline or lanoline, Iodozen forms an ointment of general utility as a healing application, and for the relief of puritis ani and vulva, hemorrhoids, prostatic irritation and gonorrhœa, in which affection it may be used as an injection.

Additional therapeutic applications:

Acne Rosacea	Eczema of auditory canal	Prurigo
Atrophic Rhinitis	Excoriations	Suppurating lupus
Adenitis chronic	Enlarged Spleen	Suppurating buboes
Arthritis	Goitre	Scrofuloderma
Abrasions	Hemorrhoids	Sycosis
Abscesses	Impetigo	Sun-burn
Burns	Irritation of the skin	Septal ulceration,
Balanitis	Ozœna	syphilitic or traumatic
Catarrh	Otorrhœa	Tinea tonsurans
Carbuncle	Post-operative wounds	Ulcerated surfaces
Chancre	of nasal cavities	Urticaria
Chancroid	Pemphigus	Varicose ulcers
Eczema	Phagedœna	Wounds

IODOZEN is put up in one ounce vials,

IODOZEN OINTMENT is offered in one ounce collapsible tubes, and in screw top jars in quantities to suit.

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LONDON, ENGLAND.

Amenorrhea, Dismenorrhea and Kindred Disorders Treated with Ergoapiol (SMITH.)

Reprint from *Obstetrics*, June, 1900.

In the treatment of Amenorrhea, Dysmenorrhea, and kindred disorders, a practical experience of a number of years has convinced me that Ergoapiol (Smith) leads all other emmenagogues in points of efficiency, certainty in action, and rapidity of results.

Other remedies I have used I have found at least to be very uncertain in their action, and a few successive failures not only cause the physician to lose faith in the value of the preparation, but also cause the patient to lose confidence in the physician. In the use of Ergoapiol (Smith) I have yet to meet my first failure. The following cases will give an idea of its merits:

Case I.—M. G., age 19; had never menstruated, very anæmic, suffered irregularly from severe pains in the abdomen; local examination gave negative results. I prescribed one capsule of Ergoapiol (Smith) every four hours, and three days later menstruation began, and has been regular ever since.

Case II.—L. D., female, age 19; *primipara*; had not menstruated since confinement, a period of ten months; had tried various emmenagogues without results; consulted me April 27th last; was given Ergoapiol (Smith) in doses of one capsule three times a day. Menstruation began on the 30th; was absolutely painless and normal in every respect.

Case III.—M. J., age 22, unmarried; had suffered from dysmenorrhea for several years; had been treated by specialists, but received no benefit. Examination disclosed no displacement, stenosis or structural cause. Patient was given Ergoapiol (Smith) four capsules daily, and has since had no return of the pain, and menstruates regularly.—DR. W. A. WRIGHTMAN, New York City.

A. O. Stimpson, M.D., C.M., Thompson, Pa., says: I have used and prescribed Celerina as a nervous sedative, in a sufficient number of cases to test its medical virtues, and by experience I find that it is by far the most effective anodyne compound that is made. It is especially adapted to such cases that will not tolerate opiates, especially in neurasthenia and hysteric convulsions. I have also used it as a calmative in several cases of insomnia, brought on by over indulgence in the use of alcoholic stimulants. I have often combined it with Peacock's Bromides very effectually. Miss A. C., a young lady, inheriting an extremely

nervous temperament from her mother, was treated by me three months ago for amenorrhea and chlorosis. Preparations of iron were prescribed for her with decided benefit, as a constitutional treatment, but she could get no rest at night, only when completely exhausted. Opiates of various kinds proved more of an excitant remedy than calmative. By the frequent and repeated use of potash, soda and ammonia, she would obtain rest when her stomach would tolerate the remedies, but Celerina proved to be the *sine qua non* in her case; the second dose scarcely ever failing to procure a protracted and refreshing sleep. Case 2. Mr. F. L., a professional house painter, occasionally afflicted with colica pictonum, immediately relieved of pain and trembling by repeated doses of Celerina given in milk. Case 3. Mrs. J. G., an aged lady, suffering from hemiplegia, attended with annoying formication in palsied limbs, was relieved of these disagreeable symptoms and of insomnia by the use of Celerina. Opiates of any kind failed to have any beneficial effect, and the bromides and preparations of valerian disagreed with her stomach. Case 4. Mr. S. S., an habitual toper, had had no sleep for three nights in succession, where the stomach was in such a condition that it refused to tolerate alcoholic stimulants in any shape, was speedily relieved by the use of Celerina. Case 5. A. C., a young child, two years old, suffering from hydrocephalus, was greatly benefited by the use of Celerina as a nervine sedative, and is in a fair way to gain unlooked for health.

The short skirt has been officially approved of in the monthly report of the secretary of the Connecticut State Board of Health, Dr. A. C. Lindsley. This official approval has an important bearing upon school sanitation, for in some instances school-teachers have been criticised for wearing short skirts while in the discharge of their duties, whereas, as is pointed out by Dr. Lindsley, there is no inconsiderable danger of the introduction of disease germs into the school-room through the agency of the long skirt, which gathers much of the filth and disease germs of the street. Fortunately, the short skirt is growing to be the fashion, and for this reason, rather than on sanitary grounds, we women school-teachers will no doubt adopt it.—*N. Y. Med. Jour.*

"I am going to fight this blamed chills and fever," said the saffron-hued man, "to the bitter end!"

And then he took his regular dose of quinine.

STANDARD PREPARATIONS

Made for and Highly Endorsed by Medical Men Everywhere.

Unguentum Resinol.*Antipruritic, Antiphlogistic,
Nutrient and Plerotic***Elixir Cascanata.***Alterative, Laxative,
Antacid and Secernent.***Resinol Soap.***Prophylactic,
Germicidal, Etc.*

"Resinolis the best remedy I have ever used in Pruritus Ani.

GEO. H. SMITH, M. D., Brooklyn, N. Y."

I have requested our druggists to carry UNGUENTUM RESINOL and RESINOL SOAP. They are all right.—

RESINOL has given me entire satisfaction. Its wide range of usefulness especially recommends it.—

A. E. EARLY, M. D., Kingman, Arizona.

Am prescribing UNGUENTUM RESINOL with great satisfaction.—J. S. BEAUDRY, M. D., Chicago, Ill.

Have used RESINOL in many cases and am exceedingly pleased with its action.—G. E. WILDER, M. D., Sandusky, Ohio.

I cannot find anything that can take the place of RESINOL.—A. AGEE, M. D., Holbrook Ky.

I have found RESINOL to be a remarkable cure for almost any type of Sore.—G. D. BOUDOUSQUIE, M.D., Tuscaloosa, Ala.

I have prescribed RESINOL in many cases and am very much pleased with it.—SAM'L G. SEWALL, M. D., 1. El21st St., New York.

I have prescribed UNGUENTUM RESINOL with great success in Eczema, Pruritis Ani and Pruritis Vulvæ.—

WM. LAMBERT, M. D., Kansas City, Mo.

I am more than pleased with UNGUENTUM RESINOL.—C. B. WALRAD, M. D., Johnstown N. Y.

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An efficient Unirritating and agreeable substitute for Naphthol Preparations in Cutaneous Diseases

The Sedative For Coughs and Analgesic
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The Promoter of Natural Sleep
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Oxidized completely in the system into water and carbonic acid thus obviating any possibility of cumulative effects

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The Safe and Agreeable Antineuralgic and Antirheumatic
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The Surgeon and Therapeutics.

Not long since a brilliant young operating surgeon declared to the writer his total unbelief in the curative effects of medicines. He challenged us to point out one remedy that was certain and unailing in its effects. To surgery and the progress of surgery he gave all the glory of the nineteenth century. Medicines were fads; therapeutic results, delusions; medical treatment, a hoax. He represents perhaps the most partisan school of the younger lot of surgeons who are rapidly becoming therapeutic nihilists. Illogically enough he did not deny the palliative effect of drugs or their convenience in affording a present relief, but cure was only to be attained through surgical measures. The patient upon whom he had just finished a most brilliant operation succumbed three days later from ether pneumonia. Every one of the patients he had operated upon were made fit to bear the operation only through the therapeutic effects of anesthetics. The surgeon did not discover the anesthesia that removes surgery out of the brutal butchery of force, the knife, the kettle of boiling pitch, and the hot iron.

The reader may think this is an overdrawn picture of the nihilistic tendencies of the average operating surgeon, and we own it to be an aggravated case, but conversation and association with the younger men of the craft convinces us that the great majority of them are ignorant to an alarming degree of the necessary therapeutic knowledge and art which can alone make the surgeon great. A man must be a great physician in order to be a great surgeon. He may perform amputations and do laparotomies in a most destructive and rapid manner. He may even be able to diagnose with precision and certainty. He may be thoroughly acquainted with the surgical literature of all times. He may have written a book and acquired a wide reputation, and yet fall far short of being a good surgeon because he is not a good doctor.

We are already experiencing some reaction from the results of the *furore operandi* especially in relation to utero-ovarian surgery. Perhaps a better example is the surgery of tuberculosis, especially of the juvenile type which is characterized by arthritic and osseous affections. It was hoped that when Koch discovered the specific germs of tuberculosis and demonstrated that disease to be infectious beyond all question, it was then hoped and confidently believed by the surgeons that an early operation and a complete removal of the focus of infection from the invaded

point or bone would certainly result in cure. We have been disappointed. The surgeon soon found that while his ability to remove everything in sight was unquestioned, his ability to recognize the limitations of the disease and stop it at its boundaries, leaving intact the normal parts, was absolutely lacking. To-day not 10 per cent. of the cases of this class are operated upon that were ten or fifteen years ago. Dr. Ridlon, of Chicago, has recently stated that not 1 per cent. of such cases are in need of a surgical operation. This taking of such a large per cent of cases out of the surgeon's hands and placing them where they properly belong, under the care of the general practitioner who has the ability to perform the duty of building up the weakened constitution of the tubercular patient, is a most noteworthy one. Tubercular infection is perhaps the most widespread of any one of the grave infections. Under most circumstances it is the most benign. In fact it is a little doubtful if, with an ordinarily hardened constitution, tuberculosis, in most parts of the body does not always tend towards spontaneous recovery. In fact the last ten years of accumulated experience of operations for the cure of bone and joint tuberculosis has forced the surgeon to look towards therapeutic resources in order to save the patient. The results have forced him to abandon a treatment that has produced little else but failures and cripples, and seek to eradicate the disease through a well-ordered course of medical and hygiene treatment. Of course when the disease has advanced, has destroyed a joint, has honeycombed a bone, has invaded the peritoneum, has become mixed with other infections and produced large pockets of pus, or attacked organs that are beyond the reach of most therapeutic measures, or those suffering from some continually irritative disturbance that will not permit of their healing, then the surgeon's knife alone can save. The need of the profession is more surgeons who are better doctors and more doctors who are better surgeons.—*Bulletin of the Cleveland General Hospital.*

Alcohol and Infection.

Whether alcohol increases our susceptibility to infection or not is a question of great importance, but one on which comparatively little work has been done. So far as experiments which have been made on animals go, it would seem that alcohol, like certain other substances, such as chloral, carbonic acid, etc., does render the consumer more liable to fall a victim to the germs

of infectious diseases, and this view is supported by clinical experience in the tropics and elsewhere. Seeing that brandy and other alcoholic stimulants are frequently given to patients suffering from infectious diseases the question presents itself whether we are helping the disease or the patient most by their exhibition.

Dr. Laitineu has recently experimented on no fewer than 342 animals—dogs, rabbits, guinea-pigs, fowls, and pigeons—with a view to settling the question. As infecting agents cultivations of the anthrax, tubercle, and diphtheria bacilli were employed. These were chosen as types of acute infection, chronic infection, and a pure intoxication. The alcohol employed was, as a rule, a twenty-five per cent. solution of ethylic alcohol in water. In greater strength the alimentary mucous membrane of the birds became inflamed. Some of the dogs had fifty per cent. It was given either by œsophageal catheter or by dropping it into the mouth from a pipette. The dose varied with the animal and its weight from 1-2 c.cm. in the case of the pigeon to 60 c.cm. in that of some of the dogs. It was administered in several ways and for varying times; sometimes in single large doses, at others in gradually increasing doses for months at a time, in order to produce here an acute and there a chronic poisoning. Dr. Laitinen found that in all these cases, without exception, the effect of the administration of alcohol, in any form whatever, was to render the animal distinctly, sometimes markedly, more susceptible to infection than were the controls.—*N. Y. Lancet.*

Regional Anesthesia with Cocaine.

In an exhaustive article on Local and Regional Anesthesia with Cocaine and other analgesic drugs, including the subarachnoid method as applied in general surgical practice, published in the Philadelphia Medical Journal of November 3d, Dr. Rudolph Matas, of New Orleans, thus sums up the indications and applications of spinal anesthesia:

1. To adults, and to reasonable persons who have good self-control, thereby excluding children, hysterical patients, and the insane.
2. To patients in whom the methods of local or regional anesthesia are inapplicable.
3. To patients suffering from emphysema, advanced asthma, chronic bronchitis, and other respiratory affections in whom a general inhalation anesthetic is absolutely contraindicated; in advanced cardiac cases with degenerative lesions, I would fear the

possible depressing effects of the injection and excitement on the circulation.

4. In the majority of cases in which the painful part of the operation is not likely to be prolonged beyond one hour and a half, as I would be averse, in the present state of our knowledge, to repeat a second cocaineization or to increase the total dose of the cocaine to more than 2 cgm., especially in exhausted subjects.

The danger of repeating the intradural injections to prolong the anesthesia is also one of the objections to the use of the method in ordinary labor. But its advantages in instrumental cases, as shown by the successful experiences of Dupaigne, of Louviciennes, France (who, according to Tuffier, first applied the subarachnoid method in labor, January, 1900), and of Bumm and Kreis, of Basle; of Doleris and Malartic of Paris; and Marx, of New York, cannot be doubted, especially in nephritic patients.—*Columbus Med. Jour.*

Joseph H. Abraham, M.D., Instructor in Laryngology in the New York Polyclinic, in a paper on "Acute Tonsillar Diseases and their Sequelæ," published in the Journal of the American Medical Association, July 21, 1900, recommends the administration at the onset of acute catarrhal tonsillitis of a saline purgative, and then the spraying or brushing of the tonsils or pharynx every hour with a solution as follows:

R. Formalin,	m. xv-xx
Potass. chlor.,	3i
Liq. ferri. chlor.,	3i
Aquæ menthæ pip. q.s. ad.	3iv
M. Sig. Use as spray.	

W. L. Estes, A.M., M.D., Director and Physician and Surgeon-in-Chief of St. Luke's Hospital, South Bethlehem, Pa., in a paper on the "Treatment of Fractures," published in the International Journal of Surgery, September, 1900, recommends a 1:5000 Formalin solution for douching. In disinfecting the wound he says that a strong solution of Formalin must be used to be efficient. The ill effects of the chemical on the tissues may be minimized by thorough washing with a normal sterile saline solution at about 110 deg. F. temperature, after the douching with the sublimate or Formalin solution.

POST Hoc.—Doctor: "Oh, well, influenza in itself isn't so terrible, but it is liable to be followed by terrible consequences."

The Patient: "Yes, I've noticed that before in your bill."—*Ex.*

The Clinical Significance of Casts.

(Kobler, Wiener Klinische Wochenschr., Nov. 14, 1900): At the present time the finding of granular and epithelial casts does not absolutely signify the morbid condition of Bright, whilst formerly this was considered as proof positive. Kobler studied this question carefully, and concluded, that the presence of casts does not always justify a diagnosis of Bright's disease. The true significance of hyaline casts is not known. Granular and epithelial casts are often found when no condition of the kidney exists, but when there is gastro-intestinal disease, especially when the latter is accompanied by violent diarrhea. This causes a lowering of the blood pressure on account of the rapid loss of water; hence a faulty metabolism of the renal epithelium and formation of casts and albumin. On the other hand, Kobler has found these casts when constipation exists. This condition is preceded by pain, which at times is very severe; this pain is considered as a reflex to the contraction of the kidney capsule, which consequently deprives the renal epithelium of its proper nutrition.—*Medical Fortnightly*.

Grippe and Its Treatment.

By Ed. Gros, M.D., Paris.

The observations of Barth, Parsons and Ollivier seem to prove conclusively that this malady is contagious, notwithstanding the contrary opinion of such eminent men as Furbinger, Leyden and Nothangel.

While the rapid spread of the disease from one point of the globe to another, is quite compatible with its contagious nature, it has been found that the disease never travels faster than the natural means of locomotion. Grippe may then be called an epidemic and contagious disease of rapid diffusibility.

Fatal Grippe without complications is a scientific curiosity and bacteriology has sought why.

The first lesions seem to appear in the respiratory tract; they consist in a deep congestion of the whole mucous membrane; then appears a purulent exudation in which the very small cocco-bacillus discovered by Pfeiffer in 1892 is found.

It is the smallest bacillus known, and cultures are with difficulty obtained.

Netter and most modern observers agree that the bacillus of Pfeiffer is but a surface germ, never or rarely penetrating deeper

than the mucous membrane. The danger therefore lies not here, but in the dangerous associations which this microbe contracts. Pfeiffer's bacillus alone is most benign, but Pfeiffer's bacillus *plus* streptococcus or staphylococcus greatly enhances the virulence of each in particular. This is also true *in vitro*. Grassberger has found that it is much easier to cultivate the bacillus of Pfeiffer, if the culture-medium already contains the staphylococcus. It lives longer and becomes more virulent.

From this rapid study of Grippe or Influenza, several important factors guide us in the treatment.

1. Grippe is due to a specific germ which makes its entrance by the respiratory tract and there sets up a primary inflammation.

2. The danger of Grippe lies not so much in the presence of the bacillus itself as its frequent association with other microbes.

3. Even when not complicated, this disease is characterised by a general depression of the vital forces, the convalescence always having a tendency to prolong itself indefinitely.

Our medication, therefore, should possess several qualities; it should be stimulating and at the same time exert an antiseptic action in the blood, and especially on the surface of the endo-derm; lastly, it should exert an anti-febrile action.

The *solution of quinine glycono-phosphate in benzoate of creosote and eucalyptol* formulated by Kugler, seems best to fulfill all these requirements. The difficulty of administering these remedies in one prescription makes the combination impractical, except when contained in a gelatine capsule. This is what has been done commercially in the preparation known as KUGLOIDS.

Each Kugloid of 20 centigrammes (about 4 minims) contains a non-caustic, chemically pure solution of Glycono-phosphate of Quinine, Eucalyptol and Benzoate of Creosote (from beechwood tar), and unites in a portable and elegant form the action of these modern agents.

Dose.—In Grippe we pursue the following course: The patient is placed on an exclusive milk diet to flush out the kidneys, then administer a Kugloid every hour the first day. The effect is almost marvellous, especially if the hourly dose of one Kugloid is continued without interruption. It is rare that the fever is not definitely broken after 24 or 48 hours, and in most cases only from 4 to 8 hours are required.

Convalescence is rapid and complication hardly ever occur.—(*Translated from the French*.)

Purpura and Scurvy.

In lecturing at Guy's Hospital a little time ago upon a case of purpura Dr. Hale White drew attention to the distinction between that disease and scurvy, a malady with which it was not infrequently confounded. Bleeding from the mouth, or from the gums, occurred in purpura; the test of scurvy was, he said, the peculiar sponginess of the gums. In this disease the gums and especially the lower ones swell up, so that they hide the teeth. On several occasions he had seen the gums, in cases of scurvy, so swollen that in order to make sure that they were there one had to pass the finger along the upper line and feel the teeth in the depression of the swollen gum. If the patient on whom he was lecturing had had scurvy, and had been as bad as he evidently was, it was very improbable that the sponginess of the gums would not have been well marked, and this point alone was enough to put scurvy out of court.—*Hospital*.

Calomel an Antiseptic in Confinements.

Theopold (*Deutsche Med. Woch.*), calls attention to the use of calomel in obstetrical antiseptics. Out of two hundred or more confinement cases he never lost one patient, and rarely feels called upon to trouble further about his cases, which usually take a normal course. He recommends the use of a shallow, wide-mouthed bottle, holding about two ounces of calomel, into which he pushes the examining fingers, previously cleansed, in such a manner as to fill the periungual and subungual sulci with the powder. All instruments and tampons used in his practice he treats in the same manner.—*Medical Age*.

Philadelphia Hospital.

In accordance with resolutions adopted by the bureau of charities, the clinical teaching at the Philadelphia Hospital is to be amplified. In addition to a continuation of the regular lectures on Wednesday and Saturdays, ward classes not exceeding ten are to be encouraged; surgical and gynecological operations are to be opened to students under proper restrictions; clinical instruction in insanity is to be made a new feature, and instruction in the specialties and in pathology is to be permitted. Dr. Joseph McFarland and Dr. Simon Flexner have been elected additional pathologists.—*Medical Record*.

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A preparation which has no value as a curative agent likewise has no sale; as a consequence it is not substituted. On the other hand as soon as any article through merit finds favor with the medical profession a host of imitators immediately spring up with the hope of securing business on the reputation made by the original preparation. At this time we wish to caution our readers that in prescribing Uterine Wafers Micajah's, the original, be specified. Don't simply specify Uterine Wafers but avoid disappointment in results by writing Micajah's Medicated Uterine Wafers. In cases of Leucorrhea, Endometritis, Amenorrhea, Gonorrhea, etc., Micajah's Medicated Uterine Wafers are especially indicated. Their special form is a convenience for introduction and a decided advantage over other methods.

Two men, a "healer" and one of his followers, are held in Victoria, B. C., for murder on account of the death of the son of one of the accused from diphtheria. The only treatment the child received consisted in the incantations of the healer, who was one of Dowie's "Zionites."—*Medical Record*.

As to Medical Testimonials.

Such great abuses have been practiced in connection with so-called testimonials by medical men as to the value of new drugs, that their exploitation is calculated to be rather a reflection upon than a safe recommendation for the use of such preparations. That the evil is not confined to any country would seem to be indicated, among other things, by a communication presented by Professor His, of Leipsic, at the recent meeting of German Naturalists and Physicians at Aachen, in the course of which it was maintained that in application and wording many of the "testimonials" in question displayed want of dignity, that few were of real value and that the manufacturers selected only the favorable opinions and rejected the others. For the correction of existing abuses the appointment of a special committee was proposed for the consideration of the following regulations: Professional opinions should be strictly confidential; new drugs should never receive medical recommendation in the lay press; medical journals should constitute the sole medium of publication and the language should be most guarded. Protection should be afforded from abuse for purposes of advertisement of references to drugs in medical journals; no remuneration should be asked or accepted for reports upon new drugs. Physicians giving testimonials should be held responsible for the text.—*Pennsylvania Medical Journal*.

The Hall of Fame.

The names of the twenty-nine immortals, selected to be placed in the Hall of Fame, have been widely published, but the public has not been comparably as well informed about the one hundred judges who made the selection. Not but that every name chosen deserves to be inscribed in the hall, since the entire list has met the approval of the New York University and of public opinion generally, but it is certain that the character of the judges determined the final result by the order of selection. Criticism as well as wonderment and disappointment have been expressed that no physician's name appears in the list, and the mistaken inference may be in the minds of some that none were eligible. Of course the conditions imposed that votes should be cast for only those who were born in America and had been dead at least ten years influenced the result. No one could, however, question the propriety of those conditions. Some ground of criticism is had in the fact that it had been originally assumed that fifty would be chosen, since it is supposable that

had it been understood beforehand that only twenty-nine would be selected the result might have been different. With that understanding Benjamin Rush might have been counted more worthy of mention. As it was he received forty-two votes. One of the judges, himself not a physician, who has stated that he voted for twenty-four out of the twenty-nine, has ascribed this to him: "From all points of view, as physician, statesman, citizen, and patriot, in our opinion Rush deserves a place in the first fifty, and we should have voted for him in the first twenty, if that had been the number." As the twenty vacant panels will be filled in 1902 it is very likely that what may have been regarded as contingencies in the first vote will be righted at that time.—*Physician and Surgeon*.

At the meeting of the Harvard Medical Society of New York, held March 24th, 1900, Dr. S. Marx said that puerperal fever is very rarely due to mixed infection. In ninety-five per cent. of all cases of disease it is due to the streptococcus. When streptococcus serum was first introduced into medicine there seemed to be good hope that the fatality of puerperal infection might be reduced by it. In twenty-five cases of pure streptococcus infection, however, treated by Dr. Marx with Marmorek's serum, all the patients died, and he will never use it again. The Crede ointment has seemed to be life saving in one case. The case was one of sapremia, not due to retained secundines, but to a pseudomembranous affection of the uterus and vagina, for which every remedy, including streptococcus serum, had been tried without any improvement. Twenty-four hours after the employment of the Crede ointment the local condition was improved. In forty-eight hours the constitutional symptoms had practically all disappeared. In one of the two cases reported by Dr. Grandin, in addition to the operation, the Crede ointment and streptococcus serum were used. Dr. Marx thinks that the use of the Crede ointment was an important element in the recovery. In another case in which certain septic symptoms had continued for eighteen days, operation was tried as a last resort, but the patient did not recover. At the autopsy military abscesses were found in the lungs and liver although they had not been noticed at the time of the operation. In extreme cases laparotomy is undoubtedly justified, provided there are no metabolic abscesses; but it is difficult to determine this.—*Medical News*, New York, July 21, 1900.



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Inhalation of Formalin in Phthisis.

The British Medical Journal of January 28th, 1890, published a most interesting paper by Dr. William Murrell, dealing with the essential oils and other volatile substances in the treatment of phthisis. The author discards the essential oils, but favors the use of Formalin, which he subjected to severe tests as regards the inhibition of growth of the bacillus tuberculosis. They showed that the addition of glycerin retarded the effects whilst Formalin pure and simple answered all the author's expectations.

The cases which Dr. Murrell reports all show that with the Formalin treatment, without any addition, he was uniformly successful. The patient was directed to inhale the substance by dropping it on lint, and thus allowing it to be absorbed.

We also wish to make some remarks on the paper of Dr. Lardner Green, which we find in the same journal under date of Jan. 20th last.

The author fully indorses, from personal observation, the conclusions Mr. Murrell has come to, and it is satisfactory to notice that he also has used this gas by inhalation, to the great advantage of his patients.

Dr. Lardner Green, however, introduces into his prescription two incompatibles, which we consider it desirable to point out.

Dr. Murrell's results confirm, from a bacteriological point of view, the advice not to introduce glycerin. There is an abundance of literature showing that glycerin forms a chemical compound with formaldehyde, named glycerin-formal, which is toxic. Although this compound has been recommended for disinfecting purposes, closer study has shown that the more noxious properties of this body by no means assist antiseptic action, but rather impede it. As we said before this has been confirmed by Dr. Murrell; and it is by no means desirable to encourage the mixture of these two bodies.

As Dr. Green has found, some persons are more susceptible than others to the fumes of Formalin; and for this reason he recommends, where indicated, the addition of aromatic spirits of ammonia. This will effect a material reduction in the penetrating power of Formalin gas; for the very simple chemical reason that Formalin gas has great affinity for ammonia, with which it readily forms a neutral compound—formamide. This results in binding up the Formalin, and very effectually reducing its activity as a bactericide.

If a patient finds the fumes of Formalin more irritant than he can conveniently bear,

he should reduce the solution by the further addition of water to half the strength, or even much less, one-tenth, which would still be effectual as an inhalation. But it will be found that even a sensitive patient will gradually be able to bear the greater volume of gas, just as a visitor to the room of a patient where Formalin has been used will, after a very short time, fail to feel the least inconvenience from the presence of the gas.

The great advantage of Formalin gas in the treatment of phthisis is shown by a great number of authorities who advocate its use, and who claim that it is equal—nay, preferable—in most cases to the open air treatment; except for cases that can go to the mountains far removed from the contaminations of a populous community. The simple reason for this is the great affinity of Formalin gas for all nitrogenous and sulphur compounds, which it quickly eliminates from the air of the room occupied by the patient. For this reason it will, under all conditions, help the general treatment of disease and minimize its symptoms. The use of Formalin for this purpose offers a subject for further study of what can not fail to be most gratifying.—*The Therapist, London, February 15, 1900.*

The Blister as a Means of Determining Death.

The Journal de Medicine, of Paris, of August 19, states that an absolutely reliable means of determining whether death is apparent or real, is to hold a candle to the skin for a few moments until a blister forms, which soon occurs. If there is still life in the body the blister will be filled with serous fluid, in obedience to the inevitable physiologic laws, but if death has actually occurred, the tissues obey only the physical laws, and these compel the fluid in a heated tissue to pass into the form of vapor. Therefore, if the blister contains merely steam, the body is an inert cadaver, but if the contents are fluid, life is not extinct.—*Four. A. M. A.*

Uterine Derangements.

I have used Aletris Cordial in my practice for over a year, and to say that I am pleased with it does not nearly express the degree of my satisfaction. Aletris Cordial fills a long-felt want with me. Symptoms attending uterine derangements have always been perplexing to physicians, but with this remedy the trouble vanishes as dew before the rising sun.—*L. M. McLendon, M.D., Georgiana, Ala.*

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The Over-examined Medical Student.

In several of the introductory addresses the question of the excessive number of examinations to which the medical student of to-day is subjected became of theme for comment.

Sir William MacCormic in distributing the prizes at St. Thomas's Hospital said that examinations were by no means an unmixed blessing—a sentiment in which the students present appeared heartily concur. They tended, he said, to specialise the student's work too much; they were hardly a reliable test of his ability; and there were certainly too many of them.

At St. George's Hospital Dr. Penrose, in alluding to the reconstitution of the University of London, said that he hoped that one good result would be a reduction in the number of examinations which the future student would have to pass in order to obtain his qualifications and degree. He thought that an entrance, an intermediate, and a final examination would be quite sufficient to satisfy all requirements. In this he surely is right. The difficulty, however, is not merely in the number of examinations for any one qualification, but in the fact that the university student has

to go up two separate ladders at the same time—one for his degree and the other for his colleges.—*Hospital*.

The United States Consul at Mainz has, according to the Philadelphia Medical Journal, called the attention of the State Department to the danger to the health of persons using silver-mounted glasses and porcelain wares. Certain kinds of silver-mounted glass and porcelain ware, such as cups, glasses, jars, vases, etc., have been placed upon the market. The silver on these articles, he says, is applied by means of a galvanoplastic process in baths which contain large quantities of potassium cyanide. As glazed wares have innumerable hair-like cracks, this poison enters these cracks, and the articles become a severe menace to the health of anybody using or handling them, and especially as it is impossible in the course of manufacture to remove this poisonous residuum. Only a short time ago a very severe case of poisoning resulted from the use of such ware. These goods are chiefly exported to the United States from Frankfurt, Berlin, and Stuttgart.—*Medical Age*.

False Pretenses of Prosperity.

Early in the present year a lecture was delivered before an Indiana medical society on the subject, "Medicine as a Business Proposition," by Dr. G. Frank Lydston of the medical department of the State University of Illinois. From the 32-page reprint of the matter we abstract one of the many practical topics happily treated under the above caption:

"One of the most potent causes of professional poverty is the mania of the doctor for a pretense of well doing. He exhibits this in many ways. One of the most pernicious is an affectation of contempt for money. This it is that often impels him to delay the rendering of his account. Oftentimes his patient offers to pay all or part of his bill. With a lordly and opulent wave of his marasmic hand the doctor says, 'Oh, that's all right; any time'll do.' And the triple-plated medical imbecile goes on his way with a dignified strut that ill befits the aching void in his epigastric region, and is decidedly out of harmony with the befringed extremities of his trousers. And then the doctor apologizes to himself on the ground of a philanthropy that is but the rankest and most asinine egotism *en masque*. When will the doctor understand that payment deferred maketh the patient dishonest? When will he consider the necessities of his wife and children as outweighing the feelings of the patient who owes him money? When will he be a man, and a time-server and truckler to appearances? He would take the money did he not fear the patient might suspect that his doctor was not prosperous. He wishes the patient to think that the doctor and his family dine with the chameleons or are fed by ravens. Yet the medical Elijah waiteth in vain for the manna-bearing birds—they know him for what he is, a counterfeit prophet, who vainly yearns for the flesh-pots of Egypt, who has a ponderous and all-consuming desire for pabulum and a microcephalic capacity for finance."—*Maryland Medical Journal*.

Scientific workers the world over have long been familiar with the remarkable results accomplished in the field of applied optics by the genius and industry of Prof. Ernst Abbe, of Jena, which have carried that science to more important conclusions than have been reached before and which have developed the great optical works at Jena, thus uniting the theories of the pure scientist with the practical details of modern methods of manufacture. The endorsement which the University of Jena gave to Prof. Abbe's early endeavors has brought great

benefits to the University itself and has opened a new field of scientific activity in encouraging trained men to devote themselves to purely scientific problems and to their practical solution.

In America, notwithstanding the rapid extension of scientific research, the higher optical field has not seen a corresponding development, for although there have been large commercial undertakings they have not shown the tendency to develop along the lines which have been so noteworthy abroad. With the death of the late Herbert R. Spencer the last of the three great American workers in applied optics passed away and as yet no trained American scientists have come forward to supply their places.

It is of general scientific interest to note the arrival in this country of one of the trained co-workers with Prof. Abbe at the Zeiss establishment, Hermann Kellner, Ph. D., who has already entered upon his duties as Scientific Director for the Spencer Lens Company of Buffalo, N. Y. Here he will continue his scientific researches with especial reference to Microscopic and Telescope Objectives.

The attempt to establish under American conditions a scientific institution in Buffalo similar in methods to that at Jena will unquestionably be watched with great interest by American scientists.

The Predatory Mosquito.

Every physician who "keeps tab" on the advances and discoveries of medical science is now aware that there are two kinds of mosquitoes—the good and the bad. We presume, however, that someone will dispute this statement, and say of this insect as the average army officer says of the Indian, "There's no good mosquito but a dead mosquito." It's true that they all sting, but some of them add insult to injury by injecting the malarial virus into her unsuspecting victim. We say *her* because we believe the male mosquito is a better-behaved insect than his spouse and does not "present his little bill" at inconvenient times.

These few remarks are but prefatory to the announcement that The Palisade Manufacturing Company has prepared and is now mailing to physicians an illustrated folder, showing in sepia the distinctive difference between *Culex* (the non-malarial) and *Anopheles* (the malarial) mosquito, with instructions as to how to detect the good insect from the bad. A copy will be mailed to any physician who has not as yet received one.

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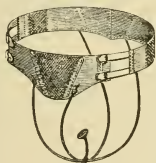
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Dr. Edwin Ricketts, of Cincinnati, is an enthusiastic follower of the late Lawson Tait as an advocate of soap and hot water, energetically applied, as antiseptic agent; and he also prefers bedside operations rather than the elaborate fixtures of a hospital, as does Dr. Joseph Price. In a recent article Dr. Ricketts remarks: House-to-house isolation, and for this the room-to-room risks of infection in a hospital are lessened to a minimum degree. Surgical cleanliness is surgical godliness, and every time we forget this we add to our death-rate. Chemical perfumes of varied kinds

will never displace soap and hot water judiciously applied in surgery.—*Am. Jour. of Surgery and Gynecology.*

Notice-- SANDER & SON'S EUCALYPTOL is invaluable in inflammation of the mucous membranes, and in all septic and infectious diseases. Apply to Dr. SANDER, Belle Plaine Iowa, for sample and literature of Sander's Eucalyptol. Meyer Bro.'s Drug Company, St. Louis, Mo., Sole Agents.

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Exit of "Practical Medicine."

A card from the editor in the October number of Practical Medicine announces that a pressure of other important and extensive responsibilities causes him to bid adieu to journalistic joys and sorrows, and that hereafter Practical Medicine will live in memory only. We most truly regret this, Dr. Stowell has occasionally touched us up in his own inimitable style, and while we have not been able to agree with him in many points, still we have enjoyed his criticisms, and we will miss them. Dr. Stowell succeeds Mr. Rose as advertising manager of the J. C. Ayer Company.—*Medical Fortnightly*.

Contract with a Lunatic.

Another case of medico-legal interest has just been decided in the Appellate Term. One Louis Fiegenbaum, who was of unsound mind, but had not been judicially so declared, applied to a well-known firm of lawyers, to institute an action for divorce against his wife, paying them \$110 on account, in advance. One of Fiegenbaum's delusions, it seems, was with respect to the fidelity of his wife, though the lawyers were entirely ignorant of his mental condition and undertook the case in good faith. A summons and complaint was made by them but was never served. In a suit by Mrs. Fiegenbaum, as committee, in the Fifth

Municipal Court to recover the sum advanced by her husband, the case was decided against her. In the Appellate Division of the Supreme Court this judgment has now been reversed, the court holding that the mere drawing of the summons was not a bringing of the suit, but only a preliminary step, and of no use or advantage to the plaintiff, and that, therefore, a cause of action had been made out against the lawyers, as for money had and received.—*Boston Med. and Surg. Jour.*

New Cure for Astigmatism.

An English popular weekly is responsible for the following gem: "In the public schools of some cities measures are taken, by presumably competent officials, to test the children's eyesight upon the assumption—often too well founded—that the parents are not sufficiently watchful in that important particular. A little boy came home one day, soon after the term had commenced, with the following note signed by the principal: 'Mr. Green: Dear Sir, It becomes my duty to inform you that your son shows decided indications of astigmatism, and his case is one that should be attended to without delay.' The father sent this answer the next day: 'Mr. Ker-shaw: Dear Sir, whip it out of him. Yours truly, John Green.'"

